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CURRENT AND FUTURE CHALLANGES



TO
ENERGY SECURITY
IN THE
MARITIME ENVIRONMENT

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MARITIME INTERDICTION
OPERATIONS
JOURNAL

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NMIOTC Commandant's Editorial

NMIOTC COMMANTDANT'S FOREWORD FOR ANNUAL CONFERENCE

The 3000-year long experience of Greeks at sea has shown that one on the few stable things at sea is the evolving a nature of maritime threats. Maritime Cyber Security, for example, which is a primary concern today, was not even discussed twenty years ago. On the contrary, Piracy at Sea, once a permanent menace for seafarers, almost disappeared during the twentieth century and reemerged in recent years in a totally new way.

By examining some established trends, however, it is reasonable to take actions in order to prepare for the future. Taking into account that maritime trade consists of more than 80 percent of the worlds circulated goods and that it will continue to be the most cost-effective means to feed our national economies with goods and energy resources, it is safe to conclude that maritime security will continue to directly affect the world economy in the future. Thus the Sea is a valuable source of growth and prosperity and the global economy depends on open, protected and secure seas and oceans for economic development, free trade, transport, energy security, tourism and good status of the environment.

Along the same lines, we can identify that: first, the global economy will increase its dependency on maritime trade; second, that the migration –both legal and illegal– will continue as result of globalization; and third, that together with increased global trade we will face the challenge of increased field of action for Maritime Criminal Activities including Transnational Organized Crime.

Obviously maritime security today remains a focal point since it should be secured against a plethora of risks and treats in the global maritime domain. The required shielding can only be achieve in a cross-sectoral, and cost efficient way where all partners from civilian and military authorities and actors (such as law enforcement, border control, customs and environmental authorities, maritime administrations, navies, coast guards, intelligence services) as well as agencies and industry (shipping, security, communication and capability support) will cooperate with mutual benefit always in conformity with existing laws, treaties and the UN Convention on the Law of the Sea (UNCLOS)...

Keeping that in mind, it is necessary to maintain a balance. On one hand we have the necessity of uploading freedom of navigation and overseas trade. On the other hand we have an ethical and legal obligation to uphold International Law, International Maritime Law, Treaties, Conventions, and UN Security Council Resolutions when conducting Maritime Security Operations.

Having identified, through delivered training to a variety of NATO member states and other partner navies a constant and growing need for proper legal training of all personnel involved in the planning and conduct of Maritime Interdiction Operations, we decided to dedicate the year 2014 to the study of legal issues arising during Maritime Security Operations (including the interaction with civilian seafarers and the need for proper evidence collection and crime scene preservation aboard vessels) and to the development of proper legal training to address these concerns.

Starting from the second semester of 2013 the initiatives NMIOTC took in support of 2014 as a "Legal Year" are as follows:

- 1. Establishing and delivering for the first time the Pilot Course 9000 "Legal Issues in MIO", dealing with a variety of issues that arise during the planning and execution phase of Maritime Security and Maritime Interdiction Operations.
- Establishing continuous and productive cooperation with key international players in law enforcement such as INTERPOL, EU-ROPOL, US European Command (EUCOM), US Drug Enforcement Administration (DEA), and the US Naval Criminal Investigative Service (NCIS). We are including their valuable experience in our training products, with a focus on illicit trafficking at sea.
- The establishment of continuous cooperation with outstanding academic institutions in the field of law, such as the University of South Africa, The Pantion University of Athens, and the University of Trace, which supported NMIOTC with the development of our Legal course.
- 4. With the assistance of the US EUCOM and the Hellenic Police SMEs we developed the module of "Evidence Collection", which ensures that boarding teams effectively collect evidence from an crime scene in order to effectively prosecute suspects in court.
- 5. We established the training module "Collection of Biometrics in the Maritime Environment" (which also deals with proper dissemination), in order to ensure that Identity Operations are executed in accordance with Alliance Concepts and International Law.
- 6. Developing the new course illicit trafficking at Sea with the assistance of US EUCOM with focus on effective countering of illicit trafficking of drugs, people, weapons etc.
- 7. We are moving towards the concept of exploiting Non Lethal Weapons in order to neutralize adversaries. We are looking for ways to incorporate to our tactics and procedures this capability which even thought is used for a long time from law enforcement agencies it is something new for most armed forces.
- 8. We established a direct cooperation with Legal Authorities such as the Legal Prosecutor Office of Piraeus for piracy Issues and we included their valuable experience in our training products.
- 9. Not to forget also the key pillar of transformation which deals with the objective of achieving a law enforcement culture for maritime forces contributing to the experimentation and development of solutions and equipment such as C3PO CEBOSS and video streaming of real time High Definition Video from boarding teams to motherships and to the Headquarters ashore for the timely assessment of findings and biometric data aimed to the evaluations of evidences and to the possible prosecution of the suspected criminals.

As everybody knows, theory that is not implemented is meaningless. After identifying the need to fill the gap on law enforcement culture, our response was immediate. Following our aim to develop a diverse and highly effective Maritime Security Operations workforce and to enhance integrations and improvement of interoperability on the High Seas, while forging at the same time a law enforcement culture, NMIOTC developed a wide range of actions to serve this goal and is making a strong and continuous effort to deliver the best and most effective training to NATO Forces and to support the International Maritime Community.

Ioannis Pavlopoulos Commodore GRC (N) NMIOTC Commadant



IMPLEMENTING MARITIME SECURITY MEASURES

by Philip Holihead

Head of Djibouti Code of Conduct Implementation, IMO

or the shipping industry maritime security perhaps means the ability for merchant ships to "pass on the seas upon their lawful occasions". But the days when the naval balance ensured the status quo are gone; navies are no longer deployed in sufficient numbers to ensure that sea lines of communication remain unthreatened unless specifically tasked to do so. Thus there is greater reliance upon local navies to be able to combat threats to maritime security.

The key to effective maritime security is clear legislation and multi-organizational cooperation. This has been the key to the effective suppression of piracy off the coast of Somalia where a cooperative efgraphical area in which piracy occurs and the ability of regional forces to operate outside their TTWs, there will always be a case for a coordinated naval presence to suppress this threat when it arises.

But piracy is not the only threat to mar-

itime security, and thus to implement full maritime security requires complete buy-in by coastal States, and to achieve that requires capacity building efforts to occur. Experience from the western Indian Ocean and Gulf of Aden area is that it is not just navies that require capacity uplift, but in fact the whole mechanism of government and legislation so that States fully understand why they need to be involved in securing the maritime space and the resources therein, and have the law to act upon it. This whole of government approach basing security decisions on the value of maritime resources is required to draw the small navies and coastquards out of their ports and create a presence fort by navies and merchant shipping has in areas such as fishing grounds, port apresulted in no successful piracy attacks proaches, tourism areas, offshore mineral for over 2 years. Given the types of geo- and gas extraction areas etc. When they are all doing this, then their presence will go a long way to suppressing criminal acts such as smuggling, IUUF etc. from which piracy can develop.

To implement maritime security in the future we should build on the lessons

learned so far. Liaison between navies and merchant shipping should be continued at the strategic level as a matter of course, so that emerging threats to security can be identified by those who regularly transit the oceans' choke points and trouble spots, to those who might be required to police them. Navies and coastguards in coastal States should be encouraged to patrol their TTWs and EEZs within robust regional frameworks in order to suppress local threats to maritime security. Established navies should be used as diplomatic tools to influence in these matters and to assist with local and regional capacity building e.g. the mechanisms by which NATO warships are able to meet at sea and both communicate and exercise together against mutually held SOPs could if exported be a significant enabler for establishing regional coordinated maritime law enforcement capability. Politicians should be encouraged to look upon such work as 'conflict prevention' rather than aid, and invest accordingly.

Philip Holihead

With 35 year's service as a Warfare Officer in the Royal Navy, and vast experience of multi-national operations including as an Executive Assistant to a NATO Commander, command of UN maritime forces in Cambodia, and diplomatic postings as the UK Defence Attaché in Egypt and Yemen, Phil Holihead has a wealth of international, operational and planning

On leaving the Royal Navy in 2009 he worked temporarily for the European Union as an expert conducting needs analysis for the Critical Maritime Routes programme. In April 2010 he was approached by the IMO to lead the newly-formed Counter-Piracy, Project Implementation Unit.

His job at IMO is to deliver capacity to counter piracy and other maritime security threats in the Gulf of Aden and Western Indian Ocean in accordance with the Djibouti Code of Conduct, manage the IMO multi-donor trust fund, and run the Counter-Piracy Project Implementation Unit.

He is a regular speaker at international conferences on countering-piracy, and has both hands-on and strategic experience of delivering maritime capacity on a regional basis.

Phil is married with 4 grown-up children and 3 grandchildren.



Global Maritime Security the "Thousand-Ship Navy" concept

by Corrado Campana Commander ITA N

n the autumn of 2005, Admiral Michael G. Mullen, the U.S. Navy's Chief ■ of Naval Operations, challenged the line of Naval Operations. world's maritime nations to raise what he called a "thousand-ship navy" to provide for the security of the maritime domain on a global scale in the twenty-first century. Speaking at the Seventeenth International Seapower Symposium at the Naval

War College, in Newport, Rhode Island, Admiral Mullen openly admitted to the assembled chiefs of navy and their representatives from seventy-five countries that "the United States Navy cannot, by itself, preserve the freedom and security of the entire maritime domain. It must count on assistance from like-minded nations interested in using the sea for lawful

purposes and precluding its use for others that threaten national, regional, or global security". He had already expressed the idea a month earlier in an address to the students of the College, but he now elaborated the concept:

"Because today's challenges are global in nature, we must be collective in our response. We are bound together in our dependence on the seas and in our need for security of this vast commons. This is a requisite for national security, global stability, and economic prosperity.

As navies, we have successfully learned how to leverage the advantages of the sea... advantages such as mobility, access, and sovereignty.... We must now leverage these same advantages of our profession to close seams, reduce vulnerabilities, and ensure the security of the domain, we collectively, are responsible for. As we combine our advantages, I envision a 1,000-ship Navy -a fleet-in-being, if you will, made up of the best capabilities of all freedom-loving navies of the world".

The rationale for the thousand-ship navy (TSN), more generally referred to also as





the "Global Maritime Network" (GMN) or "Partnership" (GMP), emanated from the increased international maritime traffic due to globalization and from the concept that promoting and maintaining the security of the global maritime commons is a key element, because the freedom of the seas is critical to any nation's long-term economic well-being. Indeed, policing and protecting the maritime commons against a wide spectrum of threats is a high priority for all nations interested in the economic prosperity and security that derives from a free and safe maritime domain.

The U.S. Navy used a series of magazine articles and speeches by various senior officers, including Admiral Mullen, to explain and build support for the thousand-ship navy. The TSN/GMP was envisioned as an international maritime force, an aggregation of maritime entities, not just of the world's navies. It would also include the world's coast guards, seaborne shipping enterprises (shipping lines, port facilities, and other maritime-related entities), and various governmental agencies and nongovernmental bodies.

In an effort to head off concerns about sovereignty, the U.S. Navy attempted to

make clear that participation would be strictly on a voluntary basis and that the goal was simply to meet the "compelling need" that emerged "for a global maritime security network, a Navy of Navies, to protect the maritime domain and to ensure that the lifeblood of globalization –trade–flows freely and unencumbered".

These public writings and statements established the guiding principles for the "Navy of Navies":

- National sovereignty would always be respected.
- Nations, navies, and maritime forces would participate where and when they have common interests.
- The focus would be solely on security in the maritime domain: ports, harbors, territorial waters, maritime approaches, the high seas, and international straits, as well as the numerous exploitable seams between them.
- While no nation can do everything, all nations could contribute something of value.
- The TSN/GMP would be a network of international navies, coast guards, maritime forces, port operators, commercial shippers, and local law enforcement, all working together.

- Nations or navies having the capacity would be expected to help less capable ones increase their ability to provide maritime security in their own ports, harbors, territorial waters, and approaches.
- Nations or navies that need assistance would have to ask for it.
- Each geographic region would develop regional maritime networks.
- To be effective and efficient, the Global Maritime Partnership would have to share information widely; classified maritime intelligence would be kept to a minimum.
- This would be a long-term effort, aimed at the security of the maritime

Years after the bold proposal for a multinational maritime force, little progress seems to have been made in constituting this "navy-in-being", mostly because of the reduced resources –financial, operational and even intellectual—invested to achieve the goal and because not all navies appear to fully appreciate the nature and the size of the challenges they face in the global maritime domain.

The U.S. Navy itself has not made the Thousand-Ship Navy/Global Maritime

strategy, and the lack of such official support for this concept has likely been interpreted by nations reluctant to participate as a sign of weakness in American commitment to the TSN/GMP; thus, this daring idea runs the risk of becoming the maritime equivalent of Woodrow Wilson's League of Nations –the international organization created after the First World War to provide a forum for resolving international disputes, which was first proposed by US President Woodrow Wilson as part of his Fourteen Points plan for an equitable peace in Europe, but of which US was never a member- that is, it will die. and not because it was a bad idea but because the country that proposed it was not committed to it.

Partnership a part of its current maritime

We know that it is possible for the international Community to focus on a difficult and asymmetric security threat and mobilize sufficient resources to specifically deal with it, as shown by the successful reduction of Somali piracy in the last years. However, the increase of other illicit activities such as the 'irregular arrivals' from Somalia to Yemen and a number of recent heroin seizures in the Indian Ocean illustrate that we are dealing with a "moving target": criminals are opportunists and move between different areas of illicit business depending on enforcement and profitability. For many poor people, the outcomes from illicit activities are so high, and the licit alternatives so unrewarding, that interdiction and prison will not deter them from trying their luck again.

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For many poor people, the outcomes from illicit activities are so high, and the licit alternatives so unrewarding, that interdiction and prison will not deter them from trying their luck again. The maritime security strategy needs therefore to target and put pressure on the organizers of maritime crime and to build viable economic alternatives to coastal communities, who could help end maritime crime simply by refusing to protect criminal interests.

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To this aim, it is necessary to build more inclusive maritime security communities. Cooperation, interaction, common protocols and practices in the field of maritime security will facilitate international or regional communities to take effective action in the long term, and the idea of the Thousand-Ship Navy/Global Maritime Partnership seemed to aim to the right direction.

Commander Corrado Campana

Commander Corrado Campana attended the Italian Naval Academy from 1987 until 1991, when he was commissioned as Ensign. He has achieved the qualification in Naval Artillery and Missile Systems and the specialization in Naval Weapons Direction. He served onboard several Italian Navy ships such as the frigates Libeccio and Maestrale and the destroyers Ardito and Luigi Durand de la Penne, and was appointed as Commanding Officer of the auxiliary ship Ponza and of the frigate Granatiere. He served in international staffs such as the Force HQ of the Multinational Force and Observers (M.F.O.) in El-Gorah (Sinai, Egypt) as Naval Advisor, and the EU Naval Force OHQ in Northwood (UK) as ACOS CJ3 Operations within the anti-piracy Operation ATALANTA. He served in national staffs such as the Command in Chief of the Italian Fleet as Head of the Artillery and Missile Systems Section, the Command of Italian Maritime Forces in Taranto as ACOS N3 Operations and at the Italian Joint Operations HQ in Rome, as Head of Maritime Operations Section



(J3). He attended the Italian Joint War College and the Course in International Humanitarian Law at the Centre for Defence High Studies in Rome and also served as Tutor for the attendees. Commander Campana has achieved the Degree in Maritime and Naval Science at the University of Pisa, the Degree in Political Science at the University of Trieste, and the Master in International and Military-strategic Studies at the L.U.I.S.S. University "Guido Carli" in Rome. Since the 1st August 2013 he is appointed at the NATO Maritime Interdiction Operational Training Centre in Souda Bay, Crete, Greece as Director of the Training Support and Transformation Directorate.



Casual Factors, Implications and Trends

by Ioannis Chapsos*

Research Fellow in Maritime Security, CTPSR/Coventry University

The privatisation of security model

The private security model has been broadly applied, both ashore and at sea and a mutually beneficial relationship between the state and the private sector can be identified in this. Through instituting this model, the state, on the one hand, reduces the defence expenditure budget for providing security in the globalised environment. On the other, it simultaneously minimises the political cost from potential human casualties of its armed forces caused by their deployment in destabilised countries, or even engagement in ambiguous operations in the territories of foreign sovereign states. The private sector offers jobs to former well trained military personnel, and the profitable contracts provide an attractive generation of

income for the companies, and also for the state in terms of taxation.

The dividing line between state and private security is even murkier in the maritime domain than it is ashore. The International Maritime Organisation (IMO) in its Circular 1405 (IMO 2011b:1), defines PMSCs as "[p]rivate contractors employed to provide security personnel, both armed and unarmed, on board for protection against piracy" and their armed employees as "Privately Contracted Armed Security Personnel" (PCASP). The land base practice shows that governments primarily choose to utilise Private Military (PMCs)/Private Security Companies (PSCs) for political ends, regardless of the financial motivations of the companies (Mandel 2002:23). However, although

PMCs and PSCs are mainly contracted by states, the main driver for PMSCs to mushroom largely comes from the shipping and offshore energy industry.

The private maritime security sector takes advantage of the unemployed, retired and well-trained military (or naval) personnel to develop the already booming and well-established business model, in the same way as on land. At the same time, the state gains a dual reward for the defence budget expenditures that were invested in their training: The allocation of funding required for the deployment of naval assets on the other side of the globe is minimised whilst income is generated in terms of taxation from the private sector activities. Public opinion (at a global level) may be in favour or against the

deployment of PMSCs on board merchant vessels, given the numerous ethical, operational and legal concerns stemming from their applied practices. However, the shipping companies are treating their use as the sole security provision through high risk areas and as the main guarantee for the security of both the seafarers and their cargo.

Vessel Protection Detachments (VPDs)

The blurred distinction between state and private maritime security becomes even murkier as a consequence of several states' common practice of deploying the so-called Vessel Protection Detachments (VPDs). Through this, what was hitherto perceived as the state's obligation has become a private endeavour as well since states are privately hiring armed military teams to shipping companies for protection of commercial vessels. On the one hand, the private sector's high demand for armed escorts at competitive prices and, on the other, the guaranteed high level training of military personnel, as well as the reduction of states' armed forces budget, offers great potential for both parties to do business. The service is available to ships registered and flying the flag of the respective state, or even to companies controlled by the state's nationals. Given also the flexibility and legal status of military personnel in terms of carrying weapons through transit ports and their consequent better protection in case of prosecutions, many companies are in favour of contracting them (Brown 2012:9). Perhaps the practice of deploying VPDs is the strongest evidence of the contemporary perception of security, which completely aligns national military power and force projection with private commercial interests. Hence, it could be interpreted as an attempt to integrate the neo-liberal model of security privatisation (Avant 2008. Ortiz 2010. Abrahamsen and Williams 2011), into the state-centric traditional mechanisms of security provision, as interpreted through the realist approach.

However, deploying a VPD on board a merchant vessel is incomparably cheaper than deploying a frigate to patrol the Indian Ocean: the limited demands on the

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state's defence budget entailed in employing VPDs compared to the deployment of naval assets on the other side of the globe clearly provide a convincing justification for adopting these tactics. The debate that emerged regarding this practice was that states were desperately trying not to completely abolish and outsource their monopoly in security provision, while more business oriented analysts suggest that states are just trying to take their share from the security provision pie, within the contemporary anti-piracy business

model (Chapsos2013). Yet, the reality is slightly different and this has been demonstrated in the cruellest way possible. That is, through the incident involving the two Italian marines deployed on board 'Enrica Lexie' (Banerji and Jose 2013). The death of the two Indian fishermen, who were shot by the marines after being mistaken for pirates. highlighted the complexity of maritime security issues and the murky framework of its provision. This can partly explain states' reluctance to keep the monopoly of security provision, both ashore and offshore, since its expeditionary forces have to operate in complex and hostile environments. On the other hand, private security providers enable governments to avoid supervision, external (and internal) legislative requirements, parliamentary inquiries or political cost when using force and conducting controversial operations abroad. Thus, especially in the maritime domain, the responsibility is transferred to the shipping companies and vessel masters, both for the choice and contract of the private security provider, as well as for covering the cost of their own security. The state retains only the right of regulation and control of the private security providers; however, practice indicates that even these are following free market principles and the states' engagement remains rhetoric (Chapsos 2013).

Private Maritime Security Companies

There is evidence to support the notion that states are still reluctant to intervene and pose restraints on the rapidly growing, already booming and highly profitable maritime security industry. On the contrary, they are also integrating PMSCs in their security provision structure; they are expanding the privatisation trend in the maritime domain and also gradually outsourcing monopolies to them. Even in states such as the Netherlands, which are still reserved on this issue and ban the use of PMSCs on board vessels flying their flag, there are 13 Dutch PMSCs registered in their homeland1 (as of November 2013), which offer their services in vessels flying foreign flags (although they may be managed by Dutch owners). An indicative study was released in February 2013, analysing the status of VPDs in Europe and addressing the critical question: should state or private protection be used against maritime piracy (Van Ginkel et al. 2013). The report clearly reflects the EU states' preference in contracting PMSCs for the vessels flying their flag, instead of deploying VPDs.

Still, regulation issues remain unclear: the IMO outsourced the regulation of PMSCs to the flag states (IMO 2011a). In this framework, and given states' selective engagement with PMSCs' regulatory issues in terms of hard law, one could argue that states are in favour of the soft law approach to regulate the private maritime security industry; yet, this approach remains broadly questioned, in terms of its applicability, efficiency and effectiveness in the maritime domain. Thus, regulation and certification is clearly another major issue. The principles of the free market dominate the private security industry, where nonstate actors are responsible for undertaking the essential issues of regulation and certification. More important, since there are no legal binding relationships between

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This is the number of Dutch PMSCs registered in the International Code of Conduct for Private Security Providers. See ICoC, available from http://www.icoc-psp.org/[accessed 15 June 2014].

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the regulating/certifying bodies and the companies, the whole process is based on two factors.

First, the prestige of a company is increased when it is certified from as many bodies as possible. This offers to the potential clients the sense that its reputation is genuine, since it is certified by diverse institutions, associations, standards or even other private companies.

Second, as long as the relationship with the regulators cannot possibly have legal implications, being based solely on a membership or paid assessment/vetting, should any wrong-doings become publicly known this will only impact on the company's reputation in the market. Definitely, in this competitive environment this is guite important, since it is the primary criterion by which a client chooses among the hundreds of available companies offering the same services. However, they are not sufficient for regulating the companies in terms analogous to those that used to be imposed by states. A simple change in the company's name for example, could overcome the effects of any potential recorded trespasses.

The private sector has established a peripheral commercial network around the node of the state, which is booming for

many reasons. This provides the opportunity to manage its own security, provide the required short term solutions and identify new business opportunities with the states' tolerance and encouragement. It can help to reduce unemployment rates with the creation of new security provision companies (training, vetting, logistics, etc.) which support the main core of security operations, following the paradigm of equivalent companies ashore. What remains to be realised is the extent to which the state will achieve the goal of managing and regulating this network, and whether it will retain the jurisdiction and control over security and force projection.

over security and force projection.

So far, states have demonstrated a selective approach towards regulating the private maritime security industry. An indicative example is the stance of the UK government towards the controversial issue of floating armouries; although there is a major issue and debate around their deployment, acceptable/legitimate standards and use, the UK Department of Business Innovation and Skills has issued 50 licences for such vessels, operating in the Indian Ocean and Gulf of Aden (McMahon 2013). Hence, the state prefers a tolerant approach, choosing to legitimise issues which are still under research in-

stead of interrupting the business model with a more robust intervention in the global market.

The trends

The need for merchant vessels to employ PMSCs or VPDs in order to provide an additional layer of ship protection is internationally accepted. In respect of this, although international organisations, such as the IMO, recognise this reality, they still need to provide a firm lead on related issues such as regulation, training, and rules for the use of force. The regulations of armed security providers do not include elements that provide minimum standards with respect to these services (regardless of their status as militaryor private). Moreover, there are no supporting globally recognised regulations in place to ensure that all providers of these services are subject to comparable controls at international level. Without such regulation, and the concomitant checks and controls, the risk of sub-standard service raises debates and breeds mistrust, as well as the likelihood of the inappropriate use of force, including lethal force.

Whilst PMSCs already provide security services to the offshore oil industry, consultancies to governmental bodies and commercial companies, what we can expect to see is a rapid increase in the extent of their engagement in maritime security challenges other than modern piracy. such as IUU fishing and trafficking related crimes at sea. And given the current international economic restraints, it will be perceived as more cost effective for states and regional organisations (such as e.g. the UN,NATO, EU) to contribute and share the financial burden of contracting PMSCs to do the job, with a local or regional mandate/contract. This practice will alleviate the demand to allocate funds from the already tight defence budget to deploy naval assets on the other side of the globe in order to enhance maritime security on behalf of fragile states. Even further, this rapidly increasing strategy will also provide the internal and external legitimisation to fragile states to outsource sovereign rights to private security providers to perform the tasks that they are incapable of executing. Consequently, developed states will not have to go through the internal struggle of persuading public opinion in this present financial crisis that

tax revenues should be allocated to deployed assets in faraway seas rather than meeting social demands at home.

All the issues raised above, highlight major concerns that have to be addressed at international level in order to enhance maritime security so as to make the vast oceans safer, as well as the concomitant promise of reward. They could also trigger the international community in identifying an international organisation with the global jurisdiction to regulate, vet and certify private security providers. This will perhaps overcome the plethora of

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different flag states' legislations which –in several cases–i complicate even more the already complex maritime security environment. This entity will also have toapply different requirements and standards between land based and maritime operators, due to the distinctiveness of the maritime

domain. Down at the state level, individual countries could improve their regulation and supervision of PMSCs. This, in turn, may enable them to use these services in enhancing homeland maritime security in the near future and also address maritime threats other than piracy accordingly.

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Ioannis Chapso

Retired Captain of the Hellenic Navy, researches the global trend of privatisation of international security in general and maritime security in particular; he investigates the extent of the states' actual regulation and control over the maritime security industry -given the flag states' responsibility and jurisdiction- using the case study of PMSCs in anti-piracy operations off Somalia since 2005. Due to the globalised nature of the maritime domain, his research identifies the gaps and the risks stemming from the industry's self-regulation and posed in international security in governance, strategy, policy, social and commercial terms.

Ioannis Chapsos introduced Maritime Security to Coventry University, and subsequently, the online MA in Maritime Security course was launched by the Centre for Peace and Reconciliation Studies (CPRS) research unit in January 2013.





Dartmouth Centre Seapower & Strategy (DCSS) University of Plymouth

by Prof Graeme Herd Dartmouth Center & Dr Fotios Moustakis

Associate Professor & Head of External Affairs of Darmouth Centre

Mandate and Vision

Seapower and Strategy (DCSS) is timely. This independent, influential and inclusive Centre meets a clear and growing need to raise knowledge, awareness and understanding of strategic and defence issues as they relate to maritime affairs and the utility of seapower in the 21st century. In late 2013 the UK Chief of Defence Staff argued that the United Kingdom (UK) military risks having "exquisite weapons systems" but a "hollowed out force" not fit for purpose. In January 2014 a former US Secretary of Defence suggested that the UK was in danger of losing full spectrum

interoperability with the US. By March

The launch of the Dartmouth Centre for

2014 the UK Chief of General Staff noted tensions in Ukraine were unforeseen and 'confound our previous assumptions about stability across Europe.' Contemporary strategic challenges -including the resilience of global networks enabling energy, food and water security, normative battles over regulating the use of the global commons, the rise in global maritime trade, a shifting military and economic strategic balance in the High North, and the mobilization of Russia's Black Sea Fleet in Sevastopol in support of territorial annexation of Crimea - highlight the dependence of island nations, such as the UK and Ireland, on seapower to maintain open lines of communication, connectivity.

and so economic prosperity and political

The Centre has three unique selling

- First, Plymouth is Britain's 'Ocean City' with a proud maritime and military history and heritage and Dartmouth hosts the BRNC, the world's most prestigious naval college.
- Second, Centre's staff consists of BR-NC's Dartmouth Strategic and Security Group with an established history of excellence and success at delivering educational opportunities to naval officer and NCO professional training, and Plymouth University's staff in the School of Government who have ex-

- pertise in maritime affairs, strategic and defence studies as well as professional military education.
- Third, through teaching, research and dialogue activities the DCSS will provide 'through life learning' to develop thought leadership abilities of professional staff officers and practitioners to enable them more efficiently and effectively navigate an increasingly complex and ambiguous strategic context. DCSS educational opportunities will be of high quality, accessible and represent value for money.

Defense and Strategic Studies at Dartmouth and Plymouth

The ten staff of the Dartmouth Centre for Seapower and Strategy (DCSS) are faculty members at the University of Plymouth and are located either on the Plymouth campus or at the Britannia Royal Naval College (BRNC), Dartmouth. These members help deliver our teaching, dialogue, and research activities.

The study of strategy and international affairs at the BRNC, can trace its roots back to the vision of the early twentieth century naval reformer, Admiral Sir Jacky Fisher. As a part of Fisher's design for a modern officer education -the so-called Selborne Scheme- the Department of History and English was established at the new naval college in Dartmouth in 1905 to inculcate cadets with a deeper knowledge of their service as well as of those broader qualities which had produced the inspired leadership of Nelson.

A long line of prominent naval historians and other academics taught at Dartmouth, including Michael Lewis, Geoffrey Callender. Christopher Llovd. Edward Hughes. Northcote Parkinson, Ruddick Mackay, Philip Towle, Geoffrey Till, Eric Grove, and Evan Davies. Many not only distinguished themselves as academics, but also as practitioners, notably in the fields of policy-advice, intelligence, and wartime operational analysis. In 1982, under the then Head of Department, Louis Wreford-Brown, History and English evolved into the Department of Strategic Studies and Maritime Warfare (SSMW), with its curriculum expanded to take-in contemporary strategic thought, international relations, maritime warfare and regional studies.

Since July 1st, 2008, Plymouth University has established a history of excellence

ACADEMIC ISSUES

and success at delivering educational opportunities to naval officer and NCO professional training at the BRNC Dartmouth. This development offered a number of synergies for both institutions of which the Department is one. The SSMW is capable of offering tailored packages of education to both students at Plymouth University and members of the UK armed forces. Today, the Department (Mark Grove, Phil Grove, Dr Fotios Moustakis, Dr Simon Murden, Dr Jane Harrold) in Dartmouth under the leadership of Professor Alan Myers (Director of Military Education) provides initial officer education for all Royal Navy and Royal Marines officers as well as courses for more experienced officers in the Royal Marines. The courses encompass the study of international history. maritime and land warfare, command and leadership, and contemporary strategic issues. The Department also represents a Ministry of Defence-wide academic resource. Members of the Department search projects, and disseminate findings at various levels across UK armed services, as well as to foreign military organizations and universities.

This experience is now complimented by Plymouth University's newly created School of Government (August 1st, 2013). Staff in the Politics and International Relations Programmes at Plymouth include areas specialists that cover the Middle East and North Africa (Dr. Shabnam Holliday and Dr. Chris Emery), Sub-Saharan Africa (Dr. Karen Treasure and Dr. Rebecca Davies), Europe (Professor Mary Farrell and Dr. Patrick Holden) and Russia and Eurasia (Professor Graeme Herd), as well as UK foreign and security policy (Dr. Jamie Gaskarth). These two groups combined. alongside Commodore (Ret) and Hon Prof Jake Moores of the School of Government and Dr. Harry Bennett and his maritime-focused colleagues in History, bring together expertise in strategic and defence studies as well as experience in professional military education in contemporary and historical, national and international contexts.

There will also be strong linkages with the School of Marine Science & Engineering (MSE) through CENORE, the Centre of Excellence in Naval Oceanographic Research and Education, and its links to degree programmes in Oceanography and Hydrography as well as its £3.9M UAE Ocean project (which is for the Development of the Naval Ocean Monitoring and Forecasting Centre in the United Arab Emirates), in partnership with the UAE Naval Advanced Solutions (NAS), CENORE, UoPEL, and Met Office.

Alongside this the Hydrographic Academy is developing structured on-line learning to degree level in hydrography, in collaboration with FUGRO World Wide and in partnership with IMarEst, the international professional body and learned society for all marine professionals. The full mission ship bridge simulator operated through the Navigation and Maritime Science subject area in MSE also offers very significant training and joint exercise synergies with undertake policy-related and personal re- BRNC and their upgraded simulator. This Academy is in the running to be named most Outstanding Employer Engagement Initiative at the 2014 Times Higher Education Awards.

> The ability to identify and understand linkages between science and technology. business and trade, defence and strategic studies, societal values and norms and environmental and maritime law, for example, is entirely relevant in the education of naval officers today.

Activities of the Centre

The DCSS will undertake valuable teaching and research. It will also help inform and shape security policy decision-making by generating education and training opportunities, research, dialogue and debate across the maritime domain.

The University of Plymouth has introduced successfully in the last five years an innovative Masters in Applied Strategy and International Security. The programme, which is currently delivered in collaboration with the Hellenic National Defence

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College in Athens to senior military officers and officials in Greece, encompasses the study of strategy and contemporary security issues, offering policy-focused courses and approach which gives students an insight into the kinds of issues which challenge Governments, armed services, and international organizations.

The programme utilises the expertise available at Dartmouth and Plymouth University, to give students an insight into the study of strategy, contemporary security problems, regional issues, and the process of policy-making. The programme provides the knowledge and intellectual skills for employment in any profession, but especially in such fields as military, diplomacy, journalism, public relations, risk analysis, security, and lobbying for either the commercial or NGO sector.

The DCSS has a policy-focused ethos: emphasising contemporary foreign policy and security problems, learning from past experiences, and outlining possible policy solutions and strategies to manage security problems. It encompasses the study of strategy, maritime warfare,

international security, regional studies. and contemporary experiences of military intervention. It offers students –especially those working in the armed services, government service, aid, community, or media - the kind of knowledge that may be of direct professional use as well as the kind of personal and intellectual skills that are valuable to all.

Dialogue and Research

In terms of dialogue and public outreach. the Centre will create an "Admirals Forum", with the view to utilising the expertise, skills and competencies, networks and social capital of retired senior officers in the region to give guidance, mentoring course participants, aid capacity development and act as DCSS Ambassadors. "If only Plymouth knew what Plymouth knows" -we are in the process of auditing the intellectual and experiential resources and willingness of our retired or semi-retired population ready and willing to make their talent available for DCSS projects. Public lectures on contemporary maritime affairs as well as history and heritage are

an effective way to engage with the public. Staff at BRNC (particularly Dr. Jane Harrold and Richard Porter) already do excellent work in this respect. This is a means to inform the wider public on mar-

The first dialogue event consisted of a panel entitled 'Seapower in the Age of Uncertainty' which opened the 'Britain and the Sea 3 Conference: Enriching Britain's Maritime Capabilities', held at Mast House 11-12 September 2014. We were privileged to have as panellists Professor Steve Haines, Professor of Public and International Law, School of Law, Greenwich University, Professor Gwythian Prins. Emeritus Research Professor. London School of Economics and Member of the Strategy Advisory Panel, Chief of the Defence Staff and of the Royal Marines Advisory Group, and Mr. Mark Grove, a Lecturer in Maritime Warfare. Department of Strategic Studies and Maritime Warfare, University of Plymouth at BRNC. A second dialogue event will be held at BRNC to celebrate the launch of the DCSS in Dartmouth.

In research terms we aim to publish policy-relevant opinion pieces (School of Government Blog) and policy-briefs, as well as more academic outputs informing our understanding of our dynamic global strategic context.

Professor Graeme P. Herd

He is founding Director of the School of Government and Associate Dean in the Faculty of Business, Plymouth University, which he joined in September 2013. The School of Government has four degree programmes -Politics, International Relations, Public Services and Sociology- with 443 undergraduate and postgraduate students and approximately 32 Faculty. From 2005-2013 Professor Herd was an international faculty member at the Geneva Centre for Security Policy (GCSP), where he served as Co-Director of its International Training Course in Security Policy and Master of Advanced Studies, accredited by the University of Geneva. Before moving to the GCSP in 2005, he was appointed Professor of Civil-Military Relations at the George C. Marshall European Center for Security Studies, Garmisch-Partenkirchen, Germany (2002-2005) and a non-resident Associate Fellow of the International Security Programme, Chatham House (2004-2007). Prior to this he was Lecturer in International Relations at both the University of Aberdeen (1997-2002), where he was Deputy Director of the

Scottish Centre for International Security (formerly Centre for Defence Studies) and Staffordshire University (1994-97) and a Projects Officer, Department of War Studies, King's College London (1993-94). During his doctoral studies on 17th century Russian military and diplomatic history he studied at the Institute of Russian History, Russian Academy of Sciences, Moscow (1991-1992) as a British Council Scholar. His own teaching and research interests have focused on diverse aspects of Russian foreign and security policy and Great Power relations. During his 21-year academic career he has written or edited nine books, written over 70 academic papers and has given over 100 academic and policy-related presentations in 46 countries.

Dr Fotios Moustakis

He was awarded a MA Honours Degree in History and Politics from the University of Aberdeen and a MSc in European Policy, Law and Management from the Robert Gordon University. In 2000, he received my Doctorate in International Relations from the University of Aberdeen. He have worked as Research Fellow at the Department of Politics and International Relations, University of Aberdeen and as Projects Officer at the Scottish Centre for International Security. He was also Module Convenor/Teaching Fellow at the University of Exeter where he taught courses on Balkan Security, International Terrorism and International Security. In 2006 he was appointed Senior Associate Member at the Centre for South Eastern European Studies, St Antony's College, Oxford University. He is also a visiting Professor at the Hellenic National Defence College. He currently work as a Senior Lecturer in Strategic Studies at the Britannia Royal Naval College. Dartmouth, which is part of University of Plymouth



The Military-Law Enforcement Alliance to Combat **Transnational** Organized Crime at Sea

> by Pierre St. Hilaire* Director, Counter-Terrorism, Public Safety & Maritime Security, ICPO-INTERPOL

"The biggest impediment to all-source analysis –to a greater likelihood of connecting the dots- is the human or systemic resistance to sharing information". The 9/11 Commission Report, at 416.

Introduction

The critical role played by international naval forces in mitigating the threat of maritime piracy off the coast of Somalia cannot be overstated. The absence of any regional or international law enforcement agency on the high seas limits the ability of the law enforcement community on land to combat piracy and other forms of transnational organized crime, including the illicit trafficking in human be-

ings, firearms, migrant smuggling, illegal fishing and dumping, smuggling of illicit goods such as charcoal and ivory, and other maritime crimes. Accordingly, law enforcement agencies, by necessity, rely on naval forces or other actors operating in that environment to report such criminal

at sea will require more robust information sharing between law enforcement and

the military. In this, it is critical for naval assets, as well as private actors traveling on the high seas, to report criminal activity to the law enforcement communityvia INTERPOL channels. As this article demonstrates, the experience gained by naval forces during counterpiracy operations will prove invaluable in countering To combat transnational organized crime or mitigating other threats in the maritime

I. Military-Law Enforcement Partnership to Combat Piracy Off the Coast of Somalia

coast of Somalia, the three major naval Ocean and Gulf of Aden, EUNAVFOR1, working relationship with INTERPOL and

In the course of combating piracy off the forces operation in the Western Indian NATO², and CMF³ have forged a strong

I would like to thank INTERPOL Criminal Intelligence Analyst Anita Gossmann for her valuable edits and comments.

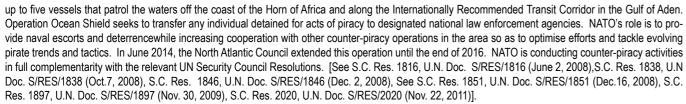
The first European Union Naval Force operation, Atalantacomprises up to five vessels and four aircraft and more than 900 personnel. See S.G. Report 623, p. 38, U.N. Doc. S/2013/623 (Oct. 21, 2013).

Operation Ocean Shield is NATO's counter piracy mission in the Gulf of Aden and off the Horn of Africa. NATO has been helping to deter and disrupt pirate attacks, while protecting vessels and helping to increase the general level of security in the region since 2008. The NATO operation Ocean Shield comprises

the law enforcement community at large⁴. The law enforcement nature of the counter piracy mandate was recognized early by the European Union. On 7 December 2010 the European Union issued an Amended Council Decision that authorized EUNAVFOR to share information collected during Operation Atalanta with INTERPOL⁵. That information included personal data such as fingerprints of suspected piratesas well as "data related to the equipment used by such persons"6. [Decision 2009/907/CFSP. Decision 2010/766/CFSP. Decision 2010/766/CFSP. Joint Action 2008/851/CFSP]. INTERPOL and EUNAVFOR have continued to exchange information on interdictions and disruptions with a view toward identifying

not only the pirates captured at sea but the leaders of the networks operating on land, as urged by UN Security Council Resolution 2020, p. 14, S.C. Res. 2020 (21 Nov. 2011) (calling upon "all States, and in particular flag, port, and coastal States, States of the nationality of victim, and perpetrators of piracy and armed robbery, and other States with relevant jurisdiction under international law and national legislation, to cooperate in determining jurisdiction, and in the investigation and prosecution of all persons responsible for acts of piracy and armed robbery off the coast of Somalia, including anvone who incites or facilitates an act of piracy")7. Similarly, INTERPOL and NATO recognized that same need to share information in connection with Operation Ocean Shield and thus entered into a Pilot Project on Information Sharing that has proven highly successful and beneficial for both organizations⁸.

With a clear mandate and desire to have their actions result in a "legal finish," these naval forces have thus effectively functioned as law enforcement agencies on the high seas, including performing traditional law enforcement functions such as the collection of physical evidence. biometrics from suspected pirates, digital exploitation, obtaining statements from suspects and victims of piracy, and testifying in civilian criminal judicial proceedings. However, this assumption of a law enforcement role by these naval forces should not be understated, indeed, it is nothing short of phenomenal. After all, arresting or "catching bad guys" for criminal prosecution is not the traditional role of a military force. Nevertheless, these naval forces, as well as those operating under their national flag, performed this law en-



- 3. Combined Task Force 151 (CTF-151) is one of three task forces operated by Combined Maritime Forces (CMF). In accordance with United Nations Security Council Resolutions, and in cooperation with non-member forces, CTF-151's mission is to disrupt piracy and armed robbery at sea, and to engage with regional and other partners to build capacity and improve relevant capabilities in order to protect global maritime commerce and secure freedom of navigation. [See S.C. Res. 1816, U.N. Doc. S/RES/1816 (June 2, 2008), S.C. Res. 1838, U.N Doc. S/RES/1838 (Oct.7, 2008), S.C. Res. 1846, U.N. Doc. S/RES/1851 (Dec.16, 2008), S.C. Res. 1897, U.N. Doc. S/RES/1897 (Nov.30, 2009)].
- 4. The European Union and other states have entered into formal transfer agreements with select regional and coastal states, notably Kenya, Seychelles, Tanzania and Mauritius, in order to facilitate the prosecution of pirates captured by navies in national courts. [See respectively Council Decision 2009/293/CFSP of 26 February 2009, Council Decision 2009/877/CFSP of 23 October 2009, Council Decision 2014/198/CFSP of 10 March 2014, Council Decision 2011/640/CFSP of 12 July 2011].
- 5. INTERPOL is an international police organization linked to 190 countries via a secure communications network. As a result, information provided to INTER-POL can be shared rapidly with law enforcement actors globally. The role of the organization and its value to victims of crime was described cogently in the Best Management Practices in respect of the investigation and prosecution of Somali piracy cases. BMP4 (Best Management Practices for Protection Against Somali Based Piracy, § 12 (2011)) included a new chapter on Post Incident Reporting and stressed the need to cooperate with and support law enforcement authorities in the investigation and prosecution of pirates captured at sea. As the BMP4 advised, "a thorough investigation is critical to ensure that potential physical evidence, including electronic evidence, is not tainted or destroyed or potential witnesses overlooked.INTERPOL may be consulted to discuss the recommended best practices and protocols for the preservation of evidence or other physical clues that could be useful to law enforcement agents pursuing an investigation of the incident". BMP4 § 12.
- 6. The data shared with INTERPOL has been entered in the INTEPOL Global Database on Maritime Piracy and analyzed. The finished analytical products have been shared with EUNAVFOR and other naval forces as well as the law enforcement agencies in INTERPOL's 190 member states. See S.C. Res. 2020, p. 19, U.N. Doc. S/RES/2020 (Nov. 22, 2011) (commending "INTERPOL for the creation of a global piracy database designed to consolidate information about piracy off the coast of Somalia and facilitate the development of actionable analysis for law enforcement" and urging "all States to share such information with INTERPOL for use in the database, through appropriate channels"). In addition to the global piracy database, INTERPOL has 14 other databases, ranging from fingerprints, DNA, stolen vessels, to firearms. All of those databases are available to the naval forces via their national law enforcement authorities.
- 7. To further strengthen the relationship between military and law enforcement, EUNAVFOR has made an important decision to second a Liaison Officer to INTERPOL. Such relationships naturally lead to increased information sharing and understanding of one another's equities.
- 8. SeeYaron Gottlieb, Combatting Maritime Piracy: Inter-Disciplinary Cooperation and Information Sharing, Case Western Reserve Journal of Int'l Law, 326 (2013) ("while the implementation of classified information rules is justified in the operations of navies during war time or in preparation for military activities, a different approach should govern the operations of naval forces when carrying out missions of a law enforcement nature such as counter-piracy activities.... withholding from law-enforcement agencies important information such as fingerprints of suspected pirates, can hardly serve the original purpose of classified information").



forcement role effectively and contributed to the successful prosecution of hundreds of pirates who had terrorized seafarers **LEGAL ISSUES**

and others navigating through the Gulf of Aden and Western Indian Ocean. However, in addition, these forces have simultaneously gained significant experience in civilian criminal judicial proceedings and

law enforcement processes that will prove beneficial for the prosecution of other forms of crime at sea by regional or other states with jurisdiction to prosecute these offenses.

II. Information Sharing to Counter Other Crimes at Sea

As mentioned above, there are numerous types of crimes that occur on the high seas, far from shore and out of the reach, sight and territorial jurisdiction of law enforcement and prosecution services. However. although most of these international navies have a mandate to collect and share information with the law enforcement community on maritime piracy, that mandate has not been extended to include other forms of crime that occur in the maritime environment. Criminals thus captured on the high seas enjoy a tremendous level of impunity, similar to that enjoyed by Somali pirates before navies started to arrest and transfer them for prosecution. The term "catch and release", which was often used to describe the disruption and detention of Somali pirates at sea, applies with equal

force to the likes of narco-traffickers captured on the high seas with a shipment of heroin. Even in the absence of an arrest, the information captured and exploited from those individuals are not shared with INTERPOL or law enforcement with the regularity and frequency as it is with maritime piracy interdiction. Information or evidence of trafficking in narcotics and other illicit goods captured or detected during occasional VBSS (Visit, Board, Search and Seize) by naval forces should routinely be shared with the law enforcement community for potential law enforcement action.

There are a number of reasons that such information is not readily shared with law enforcement, chief among these is the lack of a legal finish and questionable

jurisdiction of regional or other states to prosecutes smugglers and narcotics traffickers.Because the "legal finish" is not always self-evident to the naval vessels that encounter such criminal activity at sea, either by virtue of the limited scope of their mandate or other priorities, the data is retained by the military and receives a heightened classification. In turn, this classification prevents the sharing of that information with law enforcement and that information from entering the judicial process9. Criminal organizations are thus able to exploit this judicial vacuum, and floodour capitals with drugs and other illicit products with little to no fear of effective law enforcement interdiction or judicial

III. The Duty to Cooperate and Share Information on criminal activities at sea

Some commentators have argued that, under both UNCLOS (UN Convention on the Law of the Sea) and the SUA Convention (Suppression of Unlawful Acts Against the Safety of Maritime Navigation), there is a general duty to cooperate and share information¹⁰. There are several other conventions that provide a

clear basis and framework for cooperation between law enforcement and the military. For example, the Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988 (hereinafter the "Drugs Convention") states that "the Parties shall co-operate to the fullest extent possible to suppress illicit traffic by sea.

in conformity with the international law of the sea". The Convention also establishes jurisdiction over a drugs offence at sea even when that offence "is committed outside [the] territory [of a state] with a view to the commission, within its territory". Art. 4, p.1. Thus, a State "Party which has reasonable grounds to suspect that a

^{9.} The challenges in information sharing between military and law enforcement is something that needs to be overcome if military and law enforcement are to form the formidable team required to defeat these sophisticated organized crime networks that exploit the ungovernable space in the maritime domain. As cautioned by the 9/11 Commission "current security requirements nurture overclassification and excessive compartmentation of information among agencies," and urged a transformation from a "need to know" culture of information protection to a "need to share" culture of integration. The process of declassification can prove difficult, hence every effort should be made to prevent over classification of information. The current relationship between EUNAVFOR and INTER-POL has worked effectively largely because each agency has a better understanding of each other's equities.

^{10.} See Gottlieb, supra, at 323 ("Since piracy takes place on the high seas, and often very far from the shore, combatting piratical acts requires more than the typical police-prosecution cooperation, which is predominant in land-based ordinary law crimes such as theft or robbery. Notably, it calls for the involvement of navies as the front-line entities that both prevent attacks and gather information to facilitate prosecution").

vessel exercising freedom of navigation in accordance with international law, and flying the flag or displaying marks of registry of another Party is engaged in illicit traffic may so notify the flag State, request confirmation of registry and, if confirmed, request authorization from the flag State to take appropriate measures in regard to that vessel". Art. 17, p. 3. That State Party may also "seek authorization to:

- a) Board the vessel;
- b) Search the vessel;
- c) If evidence of involvement in illicit traffic is found, take appropriate action with respect to the vessel, persons and cargo on board. Art. 17, p. 4.

The Drugs Convention is even more explicit on the role envisioned for the naval forces: "the actions referred to above shall be carried out only by warships or military aircraft, or other ships or aircraft clearly marked and identifiable as being on government service and authorized to that effect", (emphasis added)¹¹. Thus greater law enforcement and military cooperation and information sharing in terms of crimes at sea is not wholly new. Instead, this space exists and needs to be expanded

Transnational criminal enterprises exploit the absence of law enforcement on the high seas to ship these dangerous goods to our capitals and this represents a national security threat to the international community. An effective alliance between law enforcement and the military forces that patrol the oceans, through robust information sharing and joint training, is required to defeat these criminal networks.

and exploited so as to better tackle and counter organized criminal networks making use of sea routes to transport contraband. Of course, whether it be drugs, ivory or other organized criminal activity, if evidence of that criminal activity is found by naval forces, those forces will always have a willing and trusted partner in INTERPOL to assist in the investigation and prosecution of criminal suspects detained or arrested at sea.

Conclusion

The sharp decline of maritime piracy in the Gulf of Aden and the Western Indian Ocean, due in large part to the success of the naval forces operating in that theater, assuming a law enforcement role, and the regional states shouldering a large responsibility to prosecute hundreds of Somali pirates in their domestic courts, presents an opportunity for law enforcement and military to further build on this success to counter other threats in the region, including the continuing rise of heroin trafficking and the smuggling of illicit goods in the Indian Ocean to the local states. Transnational criminal enterprises exploit the absence of law enforcement on the high seas to ship these dangerous goods to our capitals and this represents a national security threat to the international community. An effective alliance between law enforcement and the military forces that patrol the oceans, through robust information sharing and joint training, is required to defeat these criminal networks.



11. The information collected during such an operation can be communicated to law enforcement entities world-wide using INTERPOL channels. In Resolution 1 on Exchange of Information at the United Nations Conference for the Adoption of a Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, the drafters considered "the machinery developed by the International Criminal Police Organization forthe timely and efficient exchange of crime investigation information between police authorities on a world-wide basis", and thus recommended the "widest possible use should be made by police authorities of the records and communications system of the International Criminal Police Organization in achieving the goals of the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. [See Resolutions adopted by the United Nations Conference for the Adoption of a Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, Resolution 1].



Building a Law Enforcement Culture at Sea

by José Nieves Captain, USCG

I. Maritime Law Enforcement

Coast Guard is a direct descendant of the Revenue Cutter Service, created by the Secretary of the Treasury (Alexander Hamilton) in 1790, to stem the flow of maritime contraband into the newlyformed Republic. While our missions and responsibilities have grown exponentially, our anti-smuggling roots continue to be an essential part of our service to the Nation. The US Coast Guard is the lead federal maritime law enforcement agency, and the only United States agency with both the

authority and capability to enforce national and international law on the high seas, outer continental shelf, and shoreward from the U.S. Exclusive Economic Zone (EEZ) to our inland waters.

At the forefront of detection, monitoring, interdiction, and apprehension operations, the US Coast Guard deploys a variety of offshore assets against drug traffickers in the transit zone, including major cutters, long and medium range fixedwing aircraft, Airborne Use of Force (AUF) capable helicopters, and Law Enforcement Detachments (LEDETs)

embarked on U.S. Navy ships and Allied Nation vessels.

The Coast Guard continues to pursue testing and future acquisition of small unmanned aircraft systems (sUAS) to enhance its future interdiction capability. During a recent patrol aboard one of our new National Security Cutters, the Coast Guard tested the ScanEagle Unmanned Aircraft System (UAS), which proved to be a superb force multiplier in two separate law enforcement cases, resulting in the removal of 570 kilograms of cocaine and the detention of six suspected smugglers.

I. Law Enforcement Detachments (LEDETs) and Inter-Service Cooperation

Established in 1982 to serve as law enforcement specialists, conducting training and local operations. In 1986, US Public Law specifically authorized the establishment of positions for active

duty USCG personnel to carry out drug interdiction operations from naval surface vessels provided by the Department of Defense (DoD). Since DoD personnel are prohibited from directly engaging in law

enforcement activities in the US, LEDETs were tasked with operating aboard USN ships to investigate contacts and conduct boarding's.

In 1988, a new Public Law made it a

requirement that USCG law enforcement personnel be assigned to each appropriate US Navy surface vessel that transits a drug interdiction area. While there were some challenges initially as we became accustomed to working together, over the years the Navy and Coast Guard have worked together very well and now our mixture of defense and law enforcement personnel on board the same ship works seamlessly and our presence is often requested by Navy ships.

The 1989 National Defense Authorization Act designated the DoD as the lead agency of the Federal Government for the detection and monitoring of aerial and maritime trafficking of illegal drugs into the United States.

In turn, the Coast Guard was designated the lead agency for the interdiction and apprehension of illegal drug traffickers on the high seas. In order to meet these statutory responsibilities, the DoD deploys surface assets to drug interdiction areas, making ships available for direct support of USCG law enforcement operations. Now the integration of Coast Guard law enforcement and the DOD defense mission was complete.

[Over the last five years, Coast Guard Cutters and LEDETs operating in the offshore regions of the transit zone have removed more than 500 metric tons of cocaine, with a wholesale value of nearly \$17 billion].

Aircraft Use-of-Force

In 1998, the Coast Guard estimated that it was stopping less than ten percent of the

drugs entering the United States via the sea and did not have an adequate ability to stop the go-fast threat (open hulled vessels with up to 5 250HP Engines). Spurred by these estimates. Admiral James Loy, then-Commandant, directed the Coast Guard to develop a plan to counter the go-fast threat.

The Coast Guard developed the Helicopter Interdiction Tactical Squadron (HITRON). During this early proof of concept phase, HITRON intercepted and stopped all five go-fasts they encountered, stopping 2.640 pounds of cocaine, and 7,000 pounds of marijuana with a street value of over \$100 million, with all 17 suspects arrested. This 100% success rate represented a dramatic increase in go-fast seizures, and resulted in a cultural change for Coast Guard aviation and set the stage for enhanced future maritime drug interdiction efforts.

While HITRON has been very successful and today deploys on board Coast Guard. Navy and foreign partner naval vessels, its effectiveness is limited by the number of ships that can be deployed. To help in this endeavor, we are examining ways to base our HITRON helicopters on land near specific vectors of known smuggling.

Bi-Lateral Agreements

The US Coast Guard's Area of Operations in the Caribbean and Eastern Pacific Ocean consists of well over 30 countries in the Caribbean. Central and South America. This involves a multitude of Territorial Seas some only short distances from each other affording traffickers the opportunity to quickly enter any number of

foreign nations' territorial seas when law enforcement is in Pursuit.

To take away this advantage from the smugglers, the Coast Guard developed and implemented via the US Department of State over 30 Bilateral counter-illicit trafficking Agreements with neighboring nations and with Cabo Verde off the coast of Africa. These agreements cover a variety of subjects of which I will discuss just the shiprider portion.

Shiprider agreements, by which U.S. Coast Guard personnel and foreign maritime law enforcement officers ride on each other's ships, are at the core of our global maritime law enforcement strategy. Through shiprider agreements, the U.S. Coast Guard and its partners extend their legal authority and capability, and can more effectively combat illegal activity at sea worldwide.

While extensive, the Coast Guard's authority to enforce U.S. laws on the high seas is not unlimited. In accordance with international law, the U.S. Coast Guard typically takes law enforcement action against foreign-flagged vessels with the consent of the flag state. Likewise, the Coast Guard engages in law enforcement activities in the territorial sea of another state only when that coastal state authorizes the action.

Shiprider operations are particularly effective in littoral waters that smugglers often exploit with go-fast vessels. In a typical go-fast vessel case, there is very little time to obtain authorization from a coastal state to pursue a suspect vessel into territorial seas. Even with expedited procedures contained in many of the bilateral agreements, the master of a go-fast vessel might beach or sink the boat by the time a coastal state transmits authorization to pursue into its territorial



II. Joint Intelligence and Operations

Finally, transnational organized crime to include drug and human smuggling is as the name implies transnational in nature requiring a regional solution and a coordinated regional response.

Moreover one critical question is emerging: How do we justify not using Defense assets to defend our nation against Transnational Threats? Is the expectation that the nations buy more ships for law enforcement, put up more satellites to support them, put in place more technical intelligence collections processes etc. and increase cost at an astronomical level or do we strike the right fiscally prudent balance of existing national assets to address all national security concerns?

Nations do not have unlimited assets and as such it is wise to share resources and information. Certain countries in the

Mediterranean may have to use more assets and other resources to protect their shore, but it behooves the nations to the North to contribute assets and other resources to help stop the flow of people, drugs, weapons, etc. from the south as these things only serve to strengthen TOC organizations, increase national corruption, impose social and medical costs as well as stressing law enforcement and other organization and of course stressing national budgets.

One way that nations can work together aside from creating bilateral agreements (or through some form of EU process) is to create a regional Combined/Joint Maritime Operations Center in order to provide a coordinated response. The United States has several of these, but focus will be given on JIATF-South (Joint Interagency Task Force-South) which located in Key West, Florida. This center consists of representatives from all the U.S. Armed Forces, dozens of intelligence and law enforcement agencies, and about 15 international liaisons including the United Kingdom, France, and Spain with direct and quick connections back to their country's operations center. JIATF-S also has at its disposal a number of Coast Guard, Navy and foreign vessels that are shifted to them for Operational control for a certain period of time ranging from days or weeks to months.

JIATF-S is a multi-service, multi-agency, and international entity headed by a US Coast Guard 2-Star Admiral with a rotating Armed Forces 1-star vicedirector and a senior interagency civilian deputy (currently filled by DEA). Its role is to conduct counter illicit trafficking operations, intelligence fusion and multisensor correlation to detect, monitor and sometimes hand-off illicit trafficking targets. This is an excellent example of Interagency and international cooperation. Another such example with a lesser tactical/intelligence role, but with a broad Maritime Domain Awareness focus, is the CHANGI Fusion Center in Singapore. It has law enforcement and military representatives from numerous nations as well as international law enforcement personnel attached. It maintains the suspect vessel lists of some Asian Nations and monitors traffic from great distances for anomalous behavior. It has the ability to quickly respond through a network of operations centers to maritime events.

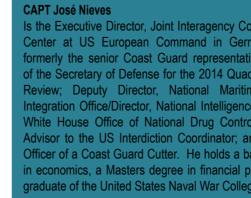
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III. Conclusion

- The importance of effective policing of international waters is critical to our global security. Working alone, no country can effectively govern its own waters while also providing an effective presence offshore closer to where the threat initiates. The offshore threat must be met:
- o Through joint operations and joint training
- Through acknowledging that interagency partners bring valuable information to the table and joining with them in a team effort against transnational organized crime
- Through international relationships codified in bilateral and shiprider agreements or some other mecha-
- Through the use of joint operations center that are multi-service, multiagency, and international
- By training with our global partners to increase capabilities to conduct unilateral and multi-lateral MLE operations



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Distinguishing Law Enforcement from Armed Conflict Paradigm in International Law

by Panagiotis Sergis*
Lt Cdr, GRC (N)

* Any views or opinions expressed in this paper are solely those of the author and do not represent the views of the Hellenic Navy General Staff or of the Greek Government.

Introduction

Modern naval operations are primarily focused on the enforcement of public order at sea. War fighting at sea, seems almost extinct, and this fact is manifested in the absence of serious interest regarding the law of naval warfare, the condition of which is often characterized as chaotic². Despite this fact, it is very difficult to distinguish between the law enforcement paradigm and armed conflict paradigm in the maritime environment. The problem lies, as it is going to be analyzed, in what the term "armed conflicts" connotes.

Existence of an "Armed Conflict"

A logical and legal prerequisite for the applicability of the armed conflict paradigm is the existence of an armed conflict, whether international or non-international. The determination of its existence is a rather perplexed issue especially in the maritime environment.



What is an "armed conflict" is not defined in the Geneva Conventions, in which the term acquired for first time legal significance³, or in any other instrument of international humanitarian law. The "omission...was apparently deliberate, since it was hoped that this term would continue to be purely factual and not become laden

with legal technicalities as did the definition of war"4.

The ICTY in the Tadić case dealt with the existence of an "armed conflict" both of an international and a non - international character, and created a precedence which was generally followed in the jurisprudence of the international criminal courts during the last two decades. According to the Appeals Chamber of the tribunal "an armed conflict exists whenever there is a resort to armed force between States or protracted armed violence between governmental authorities and organized armed groups or between such groups within a State"5. The decision seems to treat differently international and non -international armed conflicts. Whereas any armed confrontation between two states seems to suffice for the former, for the existence of the latter two cumulative criteria must be met: that of organization and more significantly that of a

 Emmanuel Roucounas, 'Some Issues Relating to War Crimes in Air and Sea Warfare' in Yoram Dinstein and Mala Tabory (eds), 'War Crimes in International Law, Martinus Nijhoff', Leiden, 1996, 275, at 279.

2. The introduction of the term served the purpose of the applicability of international humanitarian law without the existence of a formal state of war.

4. Prosecutor v Tadić, Case No. IT-94-1-T, Decision on Defence Motion for Interlocutory Appeal on Jurisdiction, 2 October 1995, para.70.

5. Ibid.

minimum intensity. But subsequently, in the same paragraph of the judgment, the Appeals Champers changes significantly direction, and takes a different approach, by applying the intensity criterion both to international and non – international armed conflicts:

"Applying the foregoing concept of armed conflicts to this case, we hold that the alleged crimes were committed in the context of an armed conflict... These hostilities exceed the intensity requirements applicable to both international and internal armed conflicts. There has been protracted, large-scale violence between the armed forces of different States and between governmental forces and organized insurgent groups"⁵.

Unfortunately, this confusion is intensified by the different approaches found in legal scholarship.

The ICRC, the organization which is generally regarded as the "guardian" of the Geneva Conventions, accepts a very low threshold regarding the existence of an international armed conflict:

"A State can always pretend, when it commits a hostile act against another State, that it is not making war, but merely engaging in a "police action", or acting in legitimate self-defence. The expression "armed conflict" makes such arguments less easy. Any difference arising between two States and leading to the intervention of armed forces is an armed conflict..."6. The International Law Association (ILA) in its Final Report on the Meaning of Armed Conflict in International Law takes a diametrically different approach:

"As a matter of customary international law a situation of armed conflict depends on the satisfaction of two essential minimum criteria, namely:

a. the existence of organized armed groups [and]

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b. engaged in fighting of some intensity"⁷.

The first requirement obviously exists in an international armed conflict, being a confrontation between armed forces of different states. The criterion of a minimum intensity is the one that creates the major difference with the ICRC's approach.

It is difficult to extrapolate clear-cut answers from state practice. In the maritime milieu although states were in most cases unwilling to accept that they were engaged in armed conflict, they were eager to demand the protection accorded by international humanitarian law to the victims of these minor engagements. For example, when the Iranians in 2007 detained the crew of a British naval unit, allegedly inside Iranian territorial waters, although none of the parties in the engagement invoked the existence of an armed conflict, the spokesperson for the British Prime Minister claimed that the appearance of the sailors on the Iranian television was in violation of the Third Geneva Convention8. The blurring of the lines between "police action" and armed conflict exists also in situations where the application of law enforcement paradigm seems straightforward, because these do not involve confrontation between naval units of various states. In the context of the anti-piracy operations taking place at the Horn of Africa, although it is generally accepted that the pirates are criminals and not combatants⁹, the Detention Standard Operating Procedure (SOP) of the European Naval Operation "EUNAVFOR Atalanta", stip-

ulates that the ICRC should be informed when suspects are detained by EUNAV-FOR Units, and should be granted access to them while they are detained 10. Moreover, the UN Security Council, in the Resolution 1851, while authorizing land – operations on Somali soil for the first time, it embraced the possibility that international humanitarian law could be applicable in the context of antipiracy operations.

In view of the present author, it would be more apt to focus on the mode of the conduct of the opposing forces in relation with human rights law and especially the right to life as the decisive criterion for determining whether an armed conflict exists, international or non-international¹¹. The difference between a law enforcement operation and an armed conflict lies in the modus operandi of the fighting forces. In the context of police actions, the use of force is an exception. Governments tend to use minimum force in order to arrest the suspected criminals, while respecting their right to life. On the other hand during armed conflicts the use of force is the norm. The need to overwhelm the adversary gives more latitude in the use of force, allowing for casualties even among the civilians, if they are not disproportionate to the concrete and direct military advantage anticipated. It is always a possibility that a limited law enforcement action escalates in a situation of an armed conflict. Real life situations are usually not crystal clear and grey areas should be expected, where the two paradigms converge. In this "gray area" the more restric-

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Christopher Greenwood, 'Scope of Application oh Humanitarian Law', in Dieter Fleck (ed), The Handbook of Humanitarian Law in Armed Conflicts, Oxford University Press, Oxford, 1995, 39, at 42.

^{6.} Jean S. Pictet (ed), The Geneva Conventions of 12 August 1949 Commentary – Volume I', International Committee of the Red Cross, Geneva, 1952, at 32 (emphasis added). The ICRC remains constant in this position. In an opinion paper titled: How is the Term 'Armed Conflict' Defined in International Humanitarian Law?, of March 2008, published in ICRC website (http://www.icrc.org/eng/assets/files/other/opinion-paper-armed-conflict.pdf, visited 5th May 2014), it is stated that "An IAC occurs when one or more States have recourse to armed force against another State, regardless of the reasons or the intensity of this confrontation" and confirms this view with reference to the Pictet's Commentary mentioned above.

^{7.} International Law Association, The Hague Conference (2010) Use of Force, *Final Report on the Meaning of Armed Conflict in International Law*, at 32 (available in ILA website http://www.ila-hq.org/en/committees/index.cfm/cid/1022, visited 6th May 2014).

Matthew B. Stannard, What Law Did Tehran Break? Capture of British Sailors a Gray Area in Application of Geneva Conventions, San Francisco Chronicle, 1 April 2007, available in http://www.sfgate.com/news/article/What-law-did-Tehran-break-Capture-of-British-2576880.php, visited 1st June 2014.

^{9.} Douglas Guilfoyle, The Laws of War and the Fight against Somali Piracy: Combatants or Criminals, 11 Melb. J. Int'l L. (2010), 141, at 142.

^{10.} SOP Legal 001 Dated 26 March 2009 (on file with the author). Although the provision in the SOP regarding the ICRC is maybe driven by political considerations, the involvement of the principal organization ensuring humanitarian protection and assistance for victims of war and armed violence, highlights the absence of a sharp distinction between the concept of armed conflict on the one hand, and the law enforcement operations on the other.

^{11.} Arne Willy Dahl & Magnus Sandbu, The Threshold of Armed Conflict, 45 The Military Law and the law of War Review, (2006), 369, at 374.

tive law enforcement paradigm, should be applicable by default. This notwithstanding, the actual behavior of the adversaries is the best indicator of which paradigm, the law enforcement or the armed conflict, is relevant.

Final Remar

In sharp contrast with the atrocities that took place in the context of land warfare during the '90s, and fueled the rapid change of IHL and ICL concerning this aspect of conflict, seas remained relatively

calm. Whereas, the current development of IHL regulating armed conflicts at sea leaves much to be desired, the law governing "police action" is evolving quickly, through decisions of the ITLOS and human rights bodies. This fact highlights the path that our navies are obliged to follow, if they want to remain relevant in the current circumstances of budget cuts. In order to perform their invaluable traditional law, navies have no alternative but to be directly involved in the law enforcement business.

Lt Cdr. HN-Panagiotis Sergis.

Professional Experience

- His sea duty assignments, as a junior officer, include various tours. He served mainly on Frigates as Navigations, Operations Officer and Law Officer.
- He served as the Commanding Officer of Greek Mine Hunter HS KALLISTO.
- As a senior officer he served as Legal Advisor and Head of the International Law Department at the Hellenic Navy General Staff.

Career Profile

- Participated as an officer onboard ships of the Hellenic Fleet in many multinational operations like Enduring Freedom at the Persian (Arabic) Gulf, Active Endeavour at the Mediterranean and Inas Bahr throughout the Arabic Peninsula.
- Served as the Legal Advisor of the first Force Commander of the Operation "ATALANTA", being the only Legal Advisor that has been deployed by the Hellenic Navy.
- Participated as part of the Greek delegation at the activities of the PSI (Proliferation Security Initiative), of the UNICPOLOS (United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea), of the CGPCS (Contact Group on Piracy off the Coast of Somalia) and the IMO (International Maritime Organization).



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"Towards a more wide accepted definition of the Terrorism Crime: rediscovering the SUA Convention"

by Matteo Del Chicca World Maritime University

he international crime of terrorism has long since threatened (also) seafarers.for a very long time. The main legal problem which plaguesthe repression of such a crime is that terrorism has no legally binding criminal law definition. To put it mildly, actually there is no criminal law notion of terrorism which is likely to reach a wide consensus among the whole international community. Even nowadays, the international community often discuss about the legal definition of terrorism international crime, with no valuable result achieved. In short, States do not agree on a common definition of such heinous crime.

The reasons of such divergences are material act is punished, the subjective

multiple, and encompass also factors not strictly related to legal arguments, such as political factors, or ethical factors. Anyway, one crucial reason of such disagreement is a legal reason, and it is the difficulty to find out an appropriate and suitable description of the "subjective element" of terrorism international crime.

In this regard, it is well known that every domestic crime, and every international crimeas well, are defined through an objective element (also known as material element), and trough a subjective element (also known as mental element, or mensrea). While the objective element included in a particular crime definition describe which kind of

element of crime definition describes the aim, the end, the motivation, of the offender.

Now, about terrorism, the vexataquaestio is: how can be described the subjective element of terrorism crime? Scholars, legal experts, judges, lawyers and politicians have tried to suggest several solutions, but no criminal law definition of terrorism mental element has been largely accepted by international community, until now. And that is because no legal description of such mental element looks to encompass every possible mensrea, every possible end or aim, which could motivate the alleged offender to commit a terrorist act. In fact, how can be confined and circumscribed the moti-

vation of a terrorist, in a precise, clear and unequivocal, legal definition which perfectly and wholly corresponds to the reality of events, and which could be safe to say belonging to the alleged offender with legal certainty? All such three requirements must be fulfilled if we wish to find a correct definition of the subjective element of terrorism crime: unequivocal wording; full correspondence to the reality; and possibility to provide evidence of that in a trial. If we look at the description of every subjective element of every crime – in domestic criminal laws, and in international criminal law as well - we could always find such three requisites perfectly fulfilled. And that happens because a certain precision is required here, due to the requirements of the principles of criminal law, especially the nullum crimen nulla poena sine praevia scripta lege poenali principle (Latin, "[There exists] no crime [and] no punishment without a pre-existing written penal law [appertaining]"), and the strict construction of penal statutes.

terrorism crime mental element suggested until today does not fulfil one. or all, such three requisites: because sometimes the suggested definition was equivocal; sometimes the suggested definition was not able to encompass all the real motivations of the perpetrator; at other times it was hard to provide evidence of it in a trial.

Even in the recent history of the international community, there are so many examples of such terrorism mental element legal definitions failures. Plenty of them both in theoretical debates. and in case law too. To stay within the confines of maritime terrorism only, take -for example- the suggested description of the subjective element of terrorism crime recently provided by

the High Court of the Seychelles in the 'Topaz' case (2009).

In the 'Topaz' case, a surveillance aircraft observed a whaler, a floating base of operations for pirates, towing two skiffs in Seychelles Economic Exclusive Zone and radioed the location to the Topaz, a Seychelles Coast Guard warship. When the Topaz arrived on the scene, it came under attack from the two skiffs, and subsequently subdued and apprehended both skiffs. The eleven accused were charged with five counts of committing terrorist acts, aiding or abetting terrorist acts, and conspiracy, as well as counts for piracy and aiding and abetting piracy. In such a trial, the High Court of the Seychelles described the subjective element of terrorism crime with the following words: "indiscriminate violence with the objective of influencing governments or international organizations for political ends".

Alas, such tentative description resulted unable to fulfil anyone of threeabove addressed requisite: in fact, it was equivocal, because the High Court Unfortunately, every description of the was unable to say with legal certainty how far the attack against the Topaz warship was made "with the objective of influencing" Seychelles government "for political ends"; it was unable to encompass all the motivations of the offenders, because they had also private ends in their mind (and not only political ends); and it resulted hard to give evidence of it in the trial, because "it is difficult if not impossible to procure direct evidence to prove the intention of an individual". The end result of all this was that every terrorism count was dismissed.

From this point of view, similar legal failures, identical in whole or in part to 'Topaz' case failures, can be found in several other cases: always to stay within the confines of maritime terrorism only, we could just recall the 'Canarias' case (Audiencia Nacional de Madrid, 2011), the 'Sherry Fishing' case (High Court of Kenya, 2011), the 'Intertuna II' case (Supreme Court of Seychelles, 2010), going back up to the 'Achille Lauro' case (1988).

So the question is: could be found a description of the terrorism crime subjective element which is unequivocal, complete, and demonstrable in a criminal proceeding? The answer, according also to decades-old unfruitful efforts noted above, is: no!No feasible description of the subjective element of terrorism crime could be found out. Does this deficiency means that no Court is able to prosecute an alleged offender for terrorism crime count? No. that is not true too. Which is the solution to such long-standing terrorism

tion in order to fight some heinous crimes (such as piracy), in a near future. And they would also follow the SUA Convention legislative technique in order to create more efficient rules to criminalize terrorism too. without faltering at the subjective element specification step.

Hopefully, the States

would rediscover the

wide powers granted

them by SUA Conven-

crime definition problems then? How can we prosecute, and eventually punish, a terrorist offender, if we are not able to find out a feasible description of terrorism crime subjective element? The answer is: we can leave the description space of the subjective eleabove), for the creation of the 1990

SUA Convention.

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ment of this crime simply... blank.In writing the criminal offence of terrorism we only detail the objective element of the crime, without providing any specific subjective element. In other words: in writing the criminal offence of terrorism we only detail the material acts punished, describing which actions, against whom and what, and in which circumstances, are punished, but without any reference at all to the precise motivations, ends, or aims, of the perpetrator.

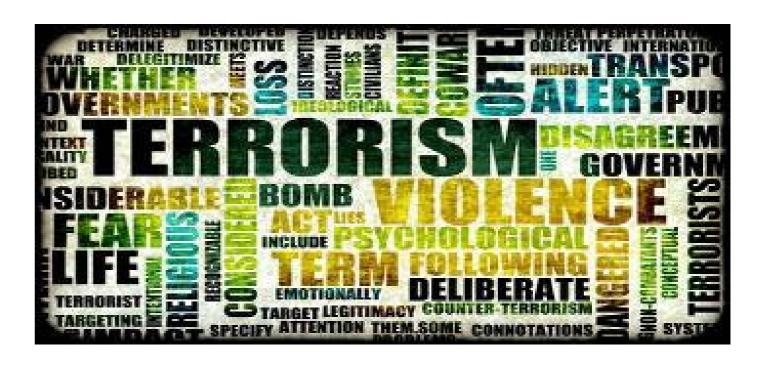
Of course, a general willingness to commit the act should be provided, but without detailing any specific aim of the offender. From a classical criminal law point of view, we could say that we shall provide only the dolusgeneralis. without any dolusspecialis.

Is this suggested solution only a mirage of (international) criminal law making, or is it a viable route to follow? On closer inspection, it is an already sailedroute. In particular, it is a special legislative technique, already adopted in international criminal law after the 'Achille Lauro' case (just recalled

Basically, the SUA Convention details only the material acts punished (at article 3), without any reference to whatever aim, end, or motivations of the offender. Just the objective element of the crimeis provided, leaving blank the space for the description of the subjective element. In a nutshell, no dolus specialis included, only the description of the unlawful acts punished along with a generic willingness to commit them (dolus generalis) provided: "Any person commits an offence if that person unlawfully and intentionally [... here follows the detailed description of the material acts punished]" (SUA Convention, article 3). No "terroristic aims", "for political ends" or similar specific subjective elements of the crime are provided. The criminal acts detailed in the SUA Convention are punished per se, and they are also punished severely (according to article 5: "Each State Party shall make the offences set forth in article 3 punishable by appropriate penalties which take



Topaz, a Seychelles Coast Guard warship



into account the grave nature of those offences").

As it is well known, the original States Parties of SUA Convention started to write the treaty after the 'AchilleLauro' case, so after a terrorism incident. Not with standing the occasion leg is (the historical circumstances after which SUA Convention was born), the ratio legis of the Convention went far beyond such historical event (a terrorism incident). Indeed the original States Parties of SUA Convention wanted to strike every criminal act able to threat the maritime navigation at large, without any binding at all.

For such reason they avoided any limitation derivable if a specific subjective element would be defined, and for the same reason they did not specify any namingfor the criminal offences provided. As an author noted: "The term 'terrorism' is conspicuously avoided throughout the entire IMO instrument" (Joyner). We could add that also the word "piracy", or the words "armed robbery at sea", are conspicuously avoided through-

out the entire SUA Convention. Why? Because the SUA Convention original law makers did not want to confine and circumscribe the criminal acts provided in specific criminal offences categories, which could limit their punitive powers. In short: the original States Parties of SUA Convention wished to strike hard any criminal offence committed against the international customary law principle of the secure maritime navigation, regardless any limitation.

Unfortunately, the international community has made very little use of the special powers and of the wide possibilities gifted by the SUA Convention, until today.

Hopefully, the States would rediscover the wide powers granted them by SUA Convention in order to fight some heinous crimes (such as piracy), in a near future. And they would also follow the SUA Convention legislative technique in order to create more efficient rules to criminalize terrorism too, without faltering at the subjective element specification step.

Dr. Matteo Del Chicca Obtained his LLM degree at University of Pisa (Law Department), with a final dissertation thesis focused on Protection of



Cultural Heritage in International Law: such thesis has been endorsed by UNESCO in 2005. In 2013 he received his PhD degree in International Law and in EU Law from University of Pisa (Law Department), with a final dissertation thesis focused on Maritime Piracv. He has been Adjunct Professor at University of Pisa -at Law Department and at Political Sciences Department as well- lecturing on several topics, including International Law, EU Law. International Criminal Law. International Humanitarian Law and International Cooperation Law. He supervised several LLM thesis. and some PhD the sis as well. Actually he is a Lecturer of International Law and of EU Law at Italian Navy Academy.

He is a member of several national and international Research Projects, focused on different issues of International Law and of EU Law, and he earned the prize as "Best 2008 Young Researche" by Italian National Centre for Research

He published book chapters and several scientific papers on prestigious peer-reviewed journals, mainly focused on international law of the sea and maritime security topics. Dr. Del Chicca joined World Maritime University (IMO) in 2014 and he has been involved in PROMERC Project, aimed at finding new measures to protect merchant ships from pirate attacks

ooking back to the past, with the attacks of 11 September 2001, and the consequent radical global changes, a new era began in the maritime security of the Alliance. Since then, challenges to maritime security have evolved in complex ways, and maritime terrorism has widened to encompass activities such as piracy, smuggling of weapons of mass destruction and Chemical, Biological, Radiological or Nuclear material by sea, threats to maritime critical infrastructure, and others.

For over twelve years the Alliance has undertaken maritime security missions in which maritime interdiction operations and other law enforcement activities have played a central and often vital part- in support of NATO's core security objectives. Operations such as Ocean Shield expanded awareness of the complexities of operating in or near strategic choke points and of the potential disruption of sea lines of communication, in particular for energy resources. In addition, operations such as Unified Protector exposed NATO forces to complex situations involving the security of energy resources and plants ashore and in littoral waters, and humanitarian challenges at sea involving the flow of refugees and economic migrants.

Additionally, since the events of 11 September, the threat posed by international terrorism has gained a new dimension. Incidents such as the USS Cole and the Limburg attacks have demonstrated that terrorists are interested in and capable of using the maritime domain to achieve their lethal objectives. Concurrently, over the past ten years the expansion of off shore drilling or production platforms and the emergence of LNG shipping as a major means of energy transportation have created rich potential targets in the maritime domain. Since 2001, preventing terrorists from attacking at or from the sea and from crossing maritime borders has thus become a major preoccupation for European and North American governments. as well as for international organizations such as NATO, the EU, the UN, and others. Greater attention might now be given to addressing the vulnerability to terrorist attacks to sea-based critical energy infrastructure or to maritime flows of energy resources. A novel aspect of this challenge will be the need for maritime forces to deal

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Building a Maritime Law Enforcement Mentality

by Nicolaos Ariatzis Lt Commander GRC (N)

with public or private security forces employed on ships or platforms. As NATO learned in OUP, however, maritime border security issues can impact military operations in ways that can affect the effectiveness and credibility of the mission. While not calling for NATO to assume a border security role, there are areas where greater engagement with border security entities could prove beneficial in conducting future law enforcement activities.

Of course, maritime law enforcement activities must take international law into consideration. In accordance with rights and jurisdictions recognized under international law, the preponderance of the sea and airspace above it remains essentially neutral. Hence maritime forces may exercise unrestricted freedom of navigation and over-flight in international waters and airspace. Maritime forces can legally operate close to the territorial waters of a nation without prior approval of the government concerned.

We should note that nations may have interpretations of international law that differ subtly or materially from those of allies, partners or adversaries. We should al-

ways be cognizant of national differences in interpretation of international law and the impact that may have on operations or even bilateral relations. Maritime forces should maintain situational awareness of the lawful and legal boundaries and demarcations of the seas, airspace and land territory claimed by coastal states. At the same time, the world's oceans and seas are an increasingly accessible environment for transnational criminal and terrorist activities. Potential maritime transnational criminal and terrorist threat includes attacks on seaborne facilities like ships, platforms, and undersea cables. Criminal activity in the maritime environment includes pirate attacks, which raise concerns about the safety of vessel crews and private citizens. Global trade relies upon secure and low-cost international maritime transportation and distribution networks, which are vulnerable to disruption (even short interruptions would seriously impact international trade as well as national economies). Any prolonged interruption of maritime transportation networks would undermine both industrial production and most governments'





abilities to provide basic services to their populations.

A key role for maritime power is to support the international community in ensuring that today's "just in time" economy, now so vital to the global economy as a whole, is allowed continued, unhindered access to sea routes free from friction, which would increase the cost of goods to the consumer and create unwanted critical shortages in numerous areas.

Meanwhile, climate changes pose new opportunities and challenges, which may allow new and economically attractive sea routes as well as improved access to resources. Maintaining freedom of navigation, sea-based trade routes, critical infrastructure, energy flows, protection of marine resources, and environmental

safety are all consistent with our national security interests. While the ability of maritime forces to conduct operations can be severely impacted by environmental conditions, training, skillful seamanship, and good tactics can often minimize these effects. Skilful seamanship, individual and collective training, and a comprehensive doctrine can help mitigate these effects, as can the acquisition of equipment designed to operate in such a demanding environment. Navies traditionally deal with numerous civilian entities, and these civilian entities have increased in number and diversity. Furthermore these relationships are not necessarily understood as civil-military cooperation, but as integral to key maritime functions. Consequently, the lack of a traditional civil-military cooperation mindset impedes coherent interaction with civilian entities and hampers a comprehensive situational awareness of the civil environment. Maritime forces should consider these impediments and alleviate impacts by procedural conjunction of functions concerned with civil-military cooperation issues.

Maritime law enforcement activities must be able to tackle the threats I have outlined here as well as support nations and law enforcement organizations in dealing with them. Information sharing and improved synergy are the key components of these relationships. Throughout the world's history the maintenance of security at sea has its own uppermost significance due to the interdependent network of commercial, financial and political relationships. Effective cooperation among all maritime security partners is the cornerstone for all well-based security architectures that serve to establish a common information environment, facilitate collaboration in shaping a common understanding of the operating domain, and permit integrated planning, coordination and conduct of actions in order to achieve the desired result and the proper end state. Hence we can evaluate and assess needs beforehand in order to understand what the full range of possible responses is and whom to depend on. It is imperative to tackle our adversaries. To this end, we must continue to forge cooperation among all relevant stakeholders, with the optimum use of regional agencies and enabling capabilities to inculcate the proper law enforcement culture at sea. Ensuring cohesion and effectiveness, we avail of the present in order to meet the future.

In conclusion it's worthwhile to mention that NMIOTC is constantly pursuit to providing the training tools as well as to contribute towards a greater understanding on how to support the maritime law enforcement activities that will reduce the potential threats to the international maritime community.

Lt Commander Nikolaos Ariatzis HN, is the NMI-OTC Head of Transformation Section.

Email your comments to: ariatzisn@nmiotc.grc.

The **role** of

new Technologies & Policies

concerning

EU Maritime Security & Borders Surveillance

by Dr Pierluigi Massimo Giansanti Manager, FINMECCANICA Group

1. Foreword

This introduction explains the aim of this article and the suggested way ahead for securing EU seas by a coordinated and Integrated Comprehensive Network-Centric Approach.

This goal is assured by the joint contribution of the following different domains:

New Technologies & Technical Developments

- Ongoing Maritime Legacy Surveillance Systems
- EU Programs for Maritime Security
- New EU Policies & Political Approaches

The strategic issue is to combine *Military* and Civil appropriate integration and coordination on *Maritime Security & Surveillance, Intelligence* and *Policing* in the Mediterranean Area, in order to foster

Network-Centric Approach, their difference Centralised and Decentralised Netwo & National Hubs.

2. New Technologies and Technical

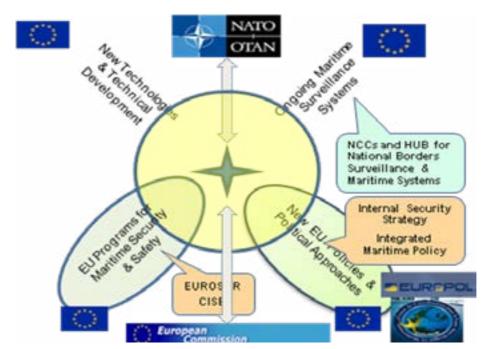
all the National Information Management Systems & Coordination Centres of EU Agencies as well as NATO Bodies (NMI-OTC, etc...) to combine, by a fully coordinated and Integrated Comprehensive Network-Centric Approach, their different Centralised and Decentralised Networks & National Hubs.

2. New Technologies and Technical Development for EU Maritime Surveillance

The real importance of an efficient *Maritime Surveillance* is well understood by Member States to establish a *Common Environment for Information Sharing*. EU Commission principal objective is to reach a *Common Shared Maritime Picture* among Member States around EU.

The principle is, first of all, to use existing systems within Member States that already have a picture of maritime activities in their proximity and to link these *Legacy Systems* among themselves. On the basis of this common approach, finally Member States will be able to coordinate the use of their capabilities at sea, both Civilians and Military Administrations (by a *Comprehensive Network-Centric Approach*).

In order to fit this goal it is mandatory to



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have **New Technologies** (New Coastal Radars, UAVs, E/O Satellites, LRIT, etc...) and New National and Regional Integrated Maritime Surveillance Systems (i.e. Italian Navy DIISM or French Navy SPATION-AV) to obtain a real Maritime Situational Awareness (Vessel Traffic Service, Integrated Inter-Agency Surveillance System, National Border Control Coordination Centre, etc...).

Before information can be share, it must just be well collected. The whole area to be monitored is almost four times the entire surface of all 28 Member States and is characterised by intense maritime traffic as Straits of Gibraltar, Messina and Calais, where many hundred of container ships, ferryboats, oil tankers daily used to sail these areas.

For such narrow areas, Land-based means are generally efficient for Maritime Security objectives. AIS (Automatic Identification System) signal reception Coastal Stations can collect information transmitted by ships above 300 tonnes, according to actual Regulations. However, it is known that AIS information is useful but insufficient. It is commonly accepted that data transmitted by this way is either incomplete or partially incorrect in 70% of cases. Many ships do not get such AIS signals, either because their weight is below 300 tonnes, or because their equipment does not work properly. It is thus necessary to merge these data with those collected by other sensors (actives and passives).

Coastal radars of VTS (Vessel Traffic Service) National Centres able to remotely interrogate ships, and even electro-optical sensors able to precisely identify ships when weather conditions and distances are adequate, are generally utilised.

Italian VTS National System is a typical example of an EU Coordinated Large System for Maritime Traffic Control and SAR Operations managed by Italian Coast Guard with the Ministry of Transports and Infra-structures' supervision.

DIISM (Dispositivo Inter-Ministeriale Integrato di Sorveglianza Marittima) is anoth-

er fully Integrated Maritime Surveillance System managed by Italian Navy with the Italian Presidency of Ministries' Council supervision.

DIISM system managed by CINCNAV (National HUB of Italian Navy for the Maritime Situational Awareness) is the Italian National Centre in which all the meta-data coming from the other Administrations (e.g. Guardia di Finanza, Coast Guard, etc...) are together collected and merged to obtain a Common Shared Recognised Maritime Picture.

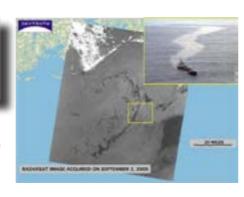
In larger maritime areas, European Industry today can offer a wide range of mature solutions as the new shore-based Coastal Radars.

Away from the coast, information collection requires embarked naval or aerial solutions. These can be Surveillance & Patrolling Aircrafts or UAV's (Unmanned Aerial Vehicles), which can embark new maritime detection radars. AIS receptors and also possible special novel electro-optical captors.



These technologies are mature and both the size and reliability of such equipment today allow a perfect format for the Naval Operations at sea, even launched from a ship. For very high seas, collecting *Maritime* Information from Space can bring new responses. Two technologies can now be fitted into one single satellite. Synthetic Aperture Radars (SAR) can detect both ships and layers of maritime pollution, even with cloud cover (e.g. Cosmo-SkyMed Constellation).

The second technology is the AIS signal receptor. Experience shows that AIS messages can be received by satellites



equipped with specific antennas, even if progress remains to be made for coverage of high traffic zones. ESA together with certain Member States is studying the possibility of placing a new Constellation of satellites in low orbit as early as 2015, offering Global AIS Coverage.

New technologies as well as the Integrated Network Systems have considerably increased in EU domain and in most important Member States the volume of information available to obtain a real Maritime Surveillance and Maritime Borders Protection. Both of these assets (New Technologies & Integrated Network Systems) are necessary for a more Secure Maritime Environment and an Integrated Maritime Surveillance. It seems vital in order to enhance Maritime Security to take also a Multi-National Comprehensive Approach to Vessel Traffic Monitoring.



3. Integrated Maritime Surveillance and Policing

In response to large-scale cocaine trafficking by sea and air, the maritime centres of MAOC-N and CECLAD-M were set up to facilitate interdiction operations in the Western Mediterranean and the Eastern Atlantic Ocean. They have been successful with several high profile operations and seizures carried out. The effective coordination of intelligence and operational capabilities are the hallmarks of these Centres' success.

To be successful, a Network-Centric Approach should be adopted in which the

EU Maritime Security apparatus should be linked and intelligence-led.

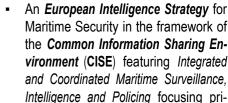
Appropriate integration and coordination of Maritime Surveillance, Intelligence and Policing in the Mediterranean would require an Information Management System designed in such a way that centralisation and decentralisation may occur simultaneously.

EUROPOL is working closely together with its EU partners in order to strength its Network.



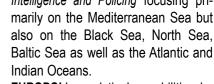
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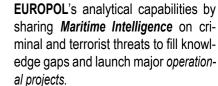
As Europe's Criminal Information Hub, EU-ROPOL has analytical capabilities to sup-



So, it is very important, to face organised

crime and terrorism, developing:





Trust, meaningful collaboration and a shared Security Culture amongst all Member States for the European Se-





As Europe's Criminal Information Hub, EUROPOL has analytical capabilities to support major investigations by transforming large amounts of maritime target-related data into actionable and timely intelligence for its EU Partners. Data and information obtained from com-

mercial and free-access Maritime Databases. Risk Analysis Systems. Earth Observation (e.g. SAT-AIS or EO Satellites Constellation like Cosmos-SkyMed), Aerial (Patrolling Aircrafts and UAVs) and Maritime Surveillance (e.g. Coastal Maritime Surveillance Systems and Vessel Traffic Centres, etc..) can easily be analysed by **EUROPOL** to derive meaning and assist in determining enforcement and intelligence priorities.

To be successful, a Network-Centric Approach should be adopted in which the EU Maritime Security apparatus should be linked and intelligence-led.

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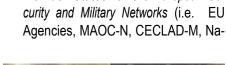


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mercial and free-access Maritime Databases, Risk Analysis Systems, Earth Observation (e.g. SAT-AIS or EO Satellites Constellation like Cosmos-SkvMed) Aerial (Patrolling Aircrafts and UAVs) and Maritime Surveillance (e.g. Coastal Maritime Surveillance Systems and Vessel Traffic Centres, etc.) can easily be analysed by **EUROPOL** to derive meaning and assist in determining enforcement and intelligence priorities.

A Comprehensive European Policy Approach on Maritime Security should address the need for Integrated and Coordinated Maritime Intelligence collection, analysis and dissemination.

At present time, the knowledge on maritime threats in the Mediterranean Sea and beyond remains still fragmented with a danger of overshadowing improvements in other key areas and limiting the effectiveness of EU Policy on Maritime Security. Therefore, the development of a *Maritime* Shared Policy Intelligence capability at European level is mandatory in order to permit Member States to fight human trafficking, drugs and other illicit behaviours rendering the Mediterranean Sea a secured space.





vies, Coast Guards, Customs, Police and Border Guard Agencies as well as FRONTEX).

Cooperation with other International Partners in the European Maritime Intelligence Network that play important roles in the Worldwide Global Security

Therefore, it is hoped that the implementation of above topics will encourage a more active approach towards an Integrated Maritime Surveillance & Policing.

4. New roles and priorities for **European Navies**

Existing EU Naval Networks are well developed and have proven their value (i.e. Italian Navy DIISM, French Navy SPATION-



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AV, etc...) also through many naval exercises and real-world Crisis Management Operations.

An example is the NATO-led operation ACTIVE ENDEAVOUR activated after 11 September 2001 terrorist attacks in USA. This operation has achieved a very high degree of visibility at sea and it has been a strong contributor to a good Maritime Situational Awareness in the Mediterranean Sea and the Strait of Gibraltar.

Another Naval Force, the European Maritime Force. EURMARFOR has contributed to operation ACTIVE ENDEAVOUR, coordinated with NATO. **EURMARFOR** is the European naval answer to the growing importance of Security and Defence in the Mediterranean Sea.

Another naval operation is the UN-led operation United Nations Interim Force in Lebanon, UNIFIL, for weapons embargo operation. This Naval Operation launched to obtain a real Maritime Domain Awareness at sea, was from the beginning one of the main tasks of both Naval Forces (NATO and EU).

In these operations, the military task was connected to political and diplomatic goals and non NATO/EU Nations.

From the technological point of view, there are three domains in which future improvements are mandatory for the Naval and Maritime Awareness Networks:

- **Communication** needs the whole spectrum of available options: Military and Civil Connectivity - Interoperability and the necessary bandwidth to exchange all kinds of information.
- Naval Platforms, Ships, Submarines and Naval Aviation must be able to fight all the asymmetric threats at sea. with a flexible high-low-mix.
- must spend more time at sea and improve their technological and logistical





maritime endurance, especially in the Wider Mediterranean Area.

From the structural point of view, the existing Command & Control Structure and the existence of Standing and On Call Forces are a backbone for successful naval operations. The ability to coordinate and integrate non NATO/EU Naval Forces must be improved and this can be achieved through exercises and the further development of naval meetings like the Annual Meeting of the Maritime Commanders of the Mediterranean, as well as commanders participating in Naval Operations in the Mediterranean Sea or the bi-annual **Sea Power Symposium** at Venice by the invitation of the Italian Navy or the Annual Meeting of the Mediterranean Coast Guards, all events equally very important to built trust and confidence between the different Government Administrations of Member States.

A Common European Approach for better technical standards and interoperability is real necessary. The European Union has, with the Lisbon Treaty and the Euro-



pean Defence.

Agency (EDA), the framework and the capability to achieve progress and more efficient use of the resources. European Union has recognised the importance of Safety, Security and Defence at sea (Integrated Maritime Surveillance). Several Regional Projects to improve the Maritime Situational Awareness have been launched. including the EU Pilot Projects for Mediterranean Maritime Surveillance.

The backbone of all projects is Maritime Domain Awareness (MDA) and how to achieve and improve it. Maritime Surveillance is indeed the real foundation for



Safety, Security and Defence. It can be used as a key for the Maritime Domain Awareness (MDA) and for the Common Information Sharing Environment (CISE), developed by the EU Commission. This matter will be an excellent example of how to achieve a real MDA. The Mediterranean Sea will be a strategic region in the near future and its bridging function between East and West as well as South and North will remain crucial. Maritime Security in the Mediterranean will be achieved through trusting Coordination, Cooperation and Integration of EU Naval Forces and all other Maritime Services.

A strong political willingness is needed, indeed, to achieve a complete and efficient Maritime Domain Awareness through a Comprehensive Integrated Shared Approach in order to maintain and improve the Maritime Security in the Mediterra-

5. Piracy as potential threat for **Maritime Routes of Mediterranean** Basin

Although the Mediterranean Sea has not been directly affected, piracy has in-



creased in the recent years significantly in bers. Somali pirates have conducted in the Gulf of Aden and in the Indian Ocean these years many attacks far from Sowith many problems for the Safety and mali coasts, targeting any kind of vessels Security of EU ship-owners crewmem-(sailing yachts, chemical tankers, bulk carriers, tankers, container ships, etc..),

> Military forces deployed in the area are insufficient with regards to the number of pirates and surface of the area to be

> and using previously hijacked vessels as

mother-vessels for their operations.

covered. The lack of military assets and weakness of East African Coastal States lead shipping companies to implement their own procedures and measures to prevent pirate attacks against their vessels.

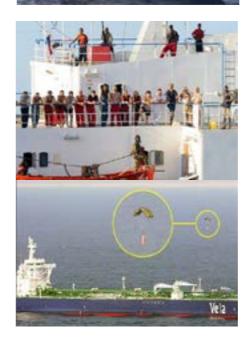
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For a ship-owner, having a vessel hijacked means that his crewmembers, carried goods and vessel remain for at least three months in pirate hands, which is the time usually needed to negotiate with pirates with a loss of money and potential damage to vessels.

Financial impacts are very important for a ship-owner, with the off-hire of the vessel; the goods remaining onboard; the potential damages suffered by the vessel, while staying at anchorage off Somalia: ransom payment (see the above figure with parachuted payment).







Dr. Pierluigi Massimo Giansanti

Dr. Pierluigi Massimo Giansanti belongs to FINMECCANICA Group and he is the former Executive Vice President & Director Bruxelles Office - Business Governance & Policy Affairs for SES, a FINMEC-CANICA Company. Belonging to FINMECCANICA Group from 1989, he started his carrier in AGUSTA-WESTLAND, then in SEL-EX Galileo and then in OTOMELARA. In 1998 he was appointed Executive Commercial Director for METEOR Missile Consortium in MBDA and he worked in Paris, for the development of new missiles systems in EUROSAM Consortium as Director, Business Devel-



opment. He was appointed Director of Operations and then Vice President, Business Intelligence - Business Development Department in SELEX Sistemi Integrati dealing with Commercial Strategy and Business Diplomacy and Intelligence. In 2009 always working for SELEX Sistemi Integrati, he was appointed Vice President, Director Institutional & Governmental Relations dealing with National and International Authorities and Governmental Military and Civil Organisations at worlwide level. In 2011, he was appointed Senior Vice President - Director Italy/EU/NATO, Sales & Marketing for SELEX Sistemi Integrati, dealing with the commercial strategy for selling large systems for Naval and Maritime Domain, Air Defence Systems with C4I & Command & Control Centres, Maritime and Safety Integrated Systems and Smart Borders Systems. Dr. Giansanti has been graduated in Rome in 1985, Mechanical & Aerospace Engineering and then he received a Master in Management and Business Administration in 1986. Polytechnic of Rome and a Master in Business Administration and Technology (MIP) in 1988, Polytechnic of Milan. In 1989 he received the Master in Purchasing & Material Management. In 2010 he was awarded with the Master in International Security Advanced Studies, CASD (Military Centre for Defence High Studies) in Rome. Co-author for the development and realization of various events for Ministry of Defence, Ministry of Interiors - Ministry of Transports & Infrastructures - Ministry of Foreign Affairs of Italy, concerning Internal and Borders Security and Maritime Safety Control as well as European Med-Cooperation topics.



by Massimo Annati Rear Admiral (retd) ITN, Chairman Europeran Working Group on Non-Lethal Wapons*

on-Lethal Weapons (NLW) were initially developed for land-based operations both of military and police forces (riot control, check point, etc), yet the evolution of the current scenarios require NLW as well for naval operations. In this case we should keep in mind that there are two significant gaps. First, naval personnel are not yet fully aware of the needs and roles of NLW. Second, the lack of firm and well defined requirements has, until now, slowed down both the development and the acquisition processes.

Despite a common origin, there are many significant differences between maritime and land-based NLW.

The sea inherently provides freedom of movement and there is no check point or road-bridge to block. Additionally is much easier to puncture a tire or to stop a vehicle than a propeller or a vessel. This, in turn, implies that the required range is much longer.

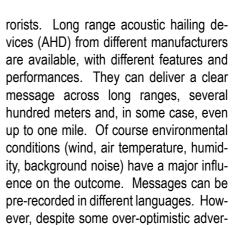
The sea is also an harsh environment and additional precautions must be taken in order to avoid unwanted casualties, on both sides.

Speaking of naval forces, there are three main areas of concern:

- Afloat Force Protection in port or choke points (i.e. when determining intent is a pre-requisite before escalating);
- Maritime Law Enforcement and MIO-MSO (i.e. when the requirement is to arrest, not to kill);
- Supporting a Boarding Team during non-cooperative boarding (in this case with basic requirements not very different from those of army and police forces).

While remaining in the maritime domain, there is also a fourth potential area: the self-protection of merchant vessels against pirate attacks; but it is important to highlight that, in this case, the requirements and the solutions are evidently totally different from those used by naval forces, for two main reasons. First, the main task is to avoid boarding rather than capture a fugitive. Second, there are severe legal limits on the carriage of firearms onboard a merchant vessel transiting within foreign territorial waters. Therefore the potential solutions should rely on non-weapon types, like barriers, water cannons, propeller entanglers, etc. Going back to the naval forces, we must observe that some basic tasks are partially in common across these fields. This means stopping a boat (either from approaching in Force Protection scenarios, or from escaping in Law Enforcement scenarios) through escalation of force: first hailing and warning, then deterring (achieving voluntary compliance through fear of more severe consequences. i.e. mostly anti-personnel NLW), and then disabling (i.e. regardless intention to comply or not, i.e. mostly anti-material NLW).

There are many available solutions and others in different level of development. Hailing and warning is the very first step, and is a task common across all possible missions, including also the case of self-protection of merchant vessels. It is of foremost importance also to avoid that careless tourists or fishermen could be confused for threatening pirates or ter-



tisements and media reports, it should be very clear that AHD are only communication devices, good to issue orders and warnings; they are NOT weapons, capable to influence the behavior through pain or discomfort, at least not in the set of ranges expected in maritime scenarios. Acoustic communication should also be integrated with optical means, supplementing the action in case of some unfavorable condition (cross wind, background noise, language barrier). Green laser beams can be visible at night-dusk several miles away. In full daylight they are anyway visible at hundreds of meters. At night-dusk a laser beam can also provide some kind of "offensive glaring", temporary affecting normal vision (and therefore the capability to drive a boat or to aim a weapon) without risking to cause any permanent eye damage. Today solutions are available with 5W output power (LaserSec Medusa), compared to the mere 250mW being used by many legacy systems, therefore extending both range and effectiveness. Flash bang munitions are also a possible solution for navy-coast guard vessels. 40mm grenade launchers can fire a munition set to explode at 300m from the vessel (Combined Systems Inc., JNLWM 4090-3), producing a loud bang and a bright flash, yet without risk of undesired







^{*} The EWG-NLW is an organization composed of governmental bodies from 14 European countries: military, police, national research centers, universities. The EWG-NLW acts as forum to exchange information and promote cooperation in this field; supports the EDA's Non-Lethal Capability Project Team (NLC-PT) and the International Law Enforcement Forum (ILEF).

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splinters or collateral damage. The message delivered by a loud nearby explosion (i.e. stop or else) is easily understood across the entire spectrum of different languages and cultures.

Most important the above systems (acoustic-optical-flash bang) can be easily arranged in sets to be moved between the deployed units and even issued to small craft or to Vessel Protection Detachments. If the warning proved insufficient, then escalation of force becomes a priority. According to the Rules of, Engagement, the available time-space margins, and the tactical situation, then the commanding officer can either resolve to use other lethal firearms.

Stopping a boat without firing to kill and destroy is one of the most challenging difficulties naval security forces are facing. Few solutions are available, though effective range is still very limited. Some services operate entanglers, these are pneumatic launchers with a sort of ropenet capable to entangle the propeller(s) of a escaping boat. They are quite effective, but should be launched from a chasing

boat running in parallel course with ranges usually limited to 15-20m. A new solution was recently announced extending the effective range up to some 200 m. There are ongoing studies to develop also a solution deploying a floating anchor, with a drag force of a couple of tons.

The other possibility is to stop the boat by firing a slug into the engine block. This is possible, and the method is currently used by the US Coast Guard and other services, but of course poses some inherent danger of causing collateral damages and requires anyway to run parallel to the escaping boat and fire at very short range to achieve the much needed precision.

non-lethal means, or step directly up to A much more technologically advanced solution is instead going to reach the operators rather soon. Radio-Frequency (RF) engine stoppers can influence the electronics of any modern engine, causing it to stop without any risk. Of course the method doesn't work in case of old carburetor engines. There are currently at least three different solutions being evaluated, respectively made in US, in UK and in Germany. The first, APEIc Footlocker, proved to be effective at 10-15m (though

the US Navy-Coast Guard requirement called for 50m range) and was procured by the Singaporean Coast Guard Police. The second, e2v Safe-Stop, offers similar performances, but the manufacturer says it could achieve up to 200m range with future developments. The third, Diehl HPM Stopper, is currently being used by many armies and police forces worldwide to protect convoys and check points. A study for maritime use has been jointly carried out by Germany and the Royal Australian Navy over the last three years. Test results are expected by late 2014-early 2015. All these equipments are quite comparable in terms of weight, volume and power, though exploiting different technologies. A possible game changer was announced, just few weeks ago: this is (could be) a sort of man-portable rifle-shaped RF emitter designed by DefTech, said to be capable

to stop an engine at over 200m. During trials, in Slovakia, it achieved the result at 65 m using only 25% of the available power. Again, some more reliable details should be available soon.

Today there is no way to stop a larger craft or a vessel, if not firing warning shots across the bow, or firing disabling shots (possibly inert rounds)into the engines, or storming it with assault boarding team. All the three possibilities have inherent risks: warning shots can be ignored; disabling fire can cause serious collateral damage;



and an opposed boarding requires careful planning and potentially dangerous execution. The only possible available solutions are, apparently, the use of trailing ropes to entangle the propeller, though this is not an easy operation anyway.

The need and requirements for NLW equipping a boarding party are not very different from those experienced in their land-based counterparts. Batons-sticks, pepper spray, and plastic handcuffs are already frequently issued to the boarding teams. Other possible solutions include flash-bang grenades and blunt-trauma munitions (often a.k.a. rubber bullets or baton rounds). The main difference with land units is the need to strictly limit the size and weight of any additional burden, as climbing a ladder with extra load could become rather unpleasant... The Belgian FN manufactures a scaled-down variant of its well-known FN-303 non-lethal rifle firing plastic bullets with a gas bottle, rather than traditional cartridges. Its compact design was especially developed for boarding parties, and in fact, is issued to the Belgian teams. Tear gas can also be a possibility but implies the use of gas masks and its employment inside closed spaces must be carefully controlled to avoid reaching of dangerous concentrations and risks of suffocation.

Among the future developments one should include the integration of some NLW within the Combat Management Systems, with remote control, stabilization, and so on. These could include acoustic hailing devices, laser dazzlers, multiple grenade launchers. As frigates and other men-of-war are frequently being used in MSO and MIO, the addition of such a capability would seems a very reasonable evolution.

Unmanned surface vehicles (USV) can offer a solution for some situations, especially, though not limited to, harbor and costal security. Most of the available methods to stop a boat require a close approach, with some potential risk for a manned patrol boat. An USV fitted with somne kinds of NLW can solve the problem and avoid dangerous situations. Additionally, an USV can even "bump" a suspect in order to stop it. The fitting of NLW on an unmanned platform is also more likely to be accepted by public opinion and policy-makers, as the very idea of armed robots freely roaming in the coast-

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al waters is likely hard to be welcome in many countries. Some types of USV are already being proposed with some non-lethal armament, such as high-pressure water cannons, multiple 40mm grenade launchers with non-lethal munitions, laser dazzlers and acoustic devices.

NLW can also have a role to deter underwater intruders. Underwater loudspeakers, similar to those used in synchronized swimming, are already available to deliver warning messages. In this case, however, the main problem lies on reliable detection, rather than causing effects.





He is a graduate of the Italian Naval Academy, which he attended from 1972 to 1976, and has degrees from Genoa State University, as well as an MBA from the Bocconi Postgraduate School in Milan. He attended the senior officer staff course at the Italian Naval War College. He served at sea from 1978 to 1983 on different units both of the Italian and U.S. navies (ITS Audace DDG 551; ITS Andrea Doria CLG 553; ITS Lupo FF 564; ITS Libeccio FF 572; USS Conyngham DDG 17; and USS Biddle CG 34). As a weapon systems engineer, he worked in the field of procurement of combat systems at different levels of responsibility, including the staff of the National Armament Director, Department of Policy of Armaments, International Cooperation; head of the International Matters at the Naval Armaments Directorate; and the director



of a joint C4I agency. Since 1999, Annati has worked continuously in the field of non-lethal weapons. In March 2012, he became chairman of the European Working Group on NLW.

Annati retired from active duty on March 1, 2011, but continues to be a constant contributor to many defense publications. He has authored a number of books and studies on defense-related matters. is frequently involved in lectures and presentations to both military and civilian education centers, and regularly takes part in international symposia and conferences.

NATO ONGOING NAVAL OPERATIONS

MARITIME SECURITY

LAW ENFORCEMENT

by Eugene Diaz del Rio Rear Admiral (OF-6), ESP N

Rear Admiral Eugene Diaz del Rio is the former Commander of the Standing NATO Maritime Group 2 (COMSNMG2). During his Command he has executed both NATO ongoing Naval Operations: Operation Active Endeavor (OAE) and Operation Ocean Shield (OOS). In OAE he has assumed duty as CTG440.03 to execute four deterrence SURGES. From December 2013 to June 2014 he has been responsible for commanding the NATO Counter-Piracy Operation -as CTF 508- in the Indian Ocean.

The basis of the following article is the lecture of Rear Admiral Eugene Diaz del Rio during the 5th NMIOTC Annual Conference

n his lecture COMSNMG2 starts with a strategic approach to Maritime Se-Lurity. He highlights the importance of the High Seas as a Global Common, as well as the need to keep open the Sea Lines of Communications, one of the primary ways for countries to continue development and globalization. He also takes into account that most human beings live inside 100 nm of a coastline, meaning that the majority of crises of the future will being the littoral environment.





Secondly Rear-Admiral Diaz del Rio analyzes the strategic scenario from a naval stand point, and he highlights that: we are in a multipolar world, where it is imperative to have access to, and the use of, the Global Common.

He also affirms that being in a complex, changeable and uncertain environment, there are two scenarios for navies:

- Deterrence & Defence (high intensity)
- Maritime Security (low intensity).

Even though navies have to be prepared for high intensity operations, the most likely are those operations related to Maritime

The aim of Maritime Security is two-fold:

- To ensure legitimate activities at sea are allowed tocontinue without illegal interference
- Toprevent the use of the seas for illegal activities, whether at sea or enabled ashore from the sea.







Maritime Security is based on two pillars:

- The first is Maritime Situational Awareness which requiresan understanding of what is happening at sea anda willingness to make decisions.
- The second is Maritime Security Operations. This involves the coordinated use of civilian, naval and other military assets, along with cooperation with other forces and agencies.

After analyzing the Mission and Lines of Operation of the two ongoing NATO navaloperations, and highlighting the point that now and in the futurenavies will continue to conduct Maritime Security Operations, COMSNMG2 considers the practical elements of conducting these operations.

The warship has a peculiar status within



the UNCLOS and other Protocols, giving her the right to conduct visits to ships under certain circumstances. During ongoing NATO naval operations, the primary activities warships will undertake when conducting MSO operations are: friendly approaches, Maritime Security Awareness Visits (MSAV) and Boardings. Any of these activities could resultin a detention. When required, detentionsare always conductedin accordance with national laws and regulations. Naval crews are required to follow national judicial protocols and procedures. A strict adherence to national regulations is vital to conduct a detention successfully.

The main conclusion that the COMSN-MG2 reaches in his lectureis:

OPERATIONAL ISSUES

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Navies are conducting, and will continue to take part in, MSO and Law Enforcement, andtherefore crews need to be appropriately trained.

Rear Admiral Eugene Diaz Del Rio

He was born in Vigo, Spain on October 11, 1961. He joined the Navy in 1980 and in 1985 he graduated as Second Lieutenant of the General Navy Corps He served on several Navy



units, Frigates, Corvettes and Patrol Boats and ne was assigned to the Tactical and Training Program Center of the Fleet being responsible for the "Principe de Asturias" aircraft carrier program and to the Fleet Training Center (CEVA-CO) as head of Above Water Warfare (AWW) branch. He also took part in the KUWAIT Liberation War in 1990, as well as in deployments of NATO'S Standing Naval Forces (STANAVFOR-LANT and STANAVFORMED). As a Lieutenant he commanded fast patrol boat "Laya" and served on board FFG "Reina Sofia" attending the training at the Royal Navy FOST in Portlant He served as Chief of Staff of the 41st Frigate Squadron (Santa Marfa Class Frigates) and ne was Staff Operations Officer of the NATO'S Standing Naval Force in the Mediterranean Sea (STANAVFORMED). He took Command of Corvette "Vencedora" with which he participated in operation"COHERENT BEHAVIOUR" ntegrated in the EUROMARFOR. He was then assigned to the Military Cabinet of the Minister of Defense and was promoted to Commander on July 1, 2004. Then, he was appointed to the NATO Maritime Component Command (MCC) Staff at Northwood (U.K.), in the N3 Division, where he dealt with all Nato Response Force issues, Operational Planning and Maritime Situational Awareness, and in 2007 he took Command of the Frigate "Mendez Nunez". During this Command he was deployed to the Indian Ocean integrated in the Royal Navy ORION-OB Task Group. He also conducted antipiracy operations off the Somali Coast and took part in several NATO and national exercises. On April 2009 he was posted to the Spanish Navy General Staff as Branch Head for Strategic Plans, where he was promoted to Captain. After the Navy Evaluation process he was selected to be promoted to Rear Admiral and designated the Spanish Navy candidate to Command the SNMG-2 during the Spanish Rotation 2013-2014. He is specialist on Naval Combat Systems Software, Tactical Action Officer and he graduated at the Naval War College. He is married and he has five children. He is fond of dinghy sailing and flying radio controlled aircraft

Maritime Close Combat

by Kostas Dervenis*
Engineer

Introduction

Of the tactics and strategies of warfare, close combat refers to a physical confrontation between two or more persons that may involve armed or unarmed fighting,

lethal and non-lethal methods, or simple escape and de-escalation of the confrontation, excluding the actual discharge of firearms. Unarmed techniques involve those applied with, or against a person or

persons using, natural weapons (hands, fingers, elbows, knees, feet, teeth, etc). Armed techniques involve those applied with, or against a person or persons using, classical blunt and edged weapons



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and other weapons of opportunity, including firearms used as blunt weapons.

Proficiency in close combat is one of the fundamental and most difficult building blocks for training the modern soldier. Archaeological studies have shown that the attrition rate of close-quarter clashes which characterized endemic tribal warfare throughout human history produced casualty rates of up to 60%, far in excess of those typical in modern warfare¹. Close combat has not changed over the millennia; a Roman legionary facing his opponent in a hand-to-hand encounter was subject to the same stress and terror as the modern combatant today. This distinction provides us with an opportunity for study, as the historical and archaeological records offer abundant material and evidence of the techniques chosen as most effective in close combat.

Close combat on the ocean makes its own particular demands: seawater and waves make for unsure footing, and freedom of movement is restricted to that offered by hulls, bulkheads, walkways, and cramped compartments. Boats and skiffs present unique challenges, and require specific methods of stability, motion, and security. In addition, ships today are almost by default fabricated from steel and other metal alloys; as a result, the possibility of collateral damage increases exponentially in many circumstances, and extreme care must be taken to prevent outcomes that could unwittingly injure or kill due to unwanted impact. In short, the environment inherent to maritime close combat is one the military operator must adapt to, much like any marine professional, whether fisherman or captain of a merchant vessel. Once again, however, the historicity of maritime close combat offers an abundance of material that can be evaluated for the resolution or termination of a potential threat. Applicable techniques and tactics used in the 16th-18th centuries to counter piracy and other maritime threats have been carefully reviewed in relation to modern-day needs and scenarios, and the results applied to the method outlined in this article.

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Moreover, one of the underlying principles used in developing the method of close combat described herein is that military personnel "must use the same type of movement and the same tactics, whether the practitioner is armed or unarmed. armored or unarmored, whether battling alone or in a group, fighting one opponent or many, whether on the battlefield itself, or in a civil disturbance"2. Under stress, combatants will revert to their training, and thus such training must be applicable under all circumstances. This same philosophy can and must extend to every environment encountered, and thankfully what is directly applicable to the maritime environment is typically applicable to the confines of urban battle as well.

Soldiers are by definition "violence professionals;" it is therefore crucial that military personnel begin their tenure by understanding the drivers and processes involved in the escalation of force in the human animal. Moreover, different levels of force may be required in environments where conflict may rapidly change from non-lethal to lethal, or simply dissipates over a matter of hours; many military operations, such as peacekeeping missions

or crew control during the inspection of a suspect vessel, may limit the use of deadly weapons. Close combat training can save the lives of both soldiers and opponents when an unexpected confrontation occurs

Patterns of Escalation and Related Countermeasures

Military personnel involved in interdiction missions are faced with an array of violence in their task, ranging from complete compliance to lethal force. It is taken for granted that operators employing the methods outlined in this article may be responding to, or investigating, a potential threat that may represent a clear and present danger to allied States, as defined by international law and with the full authority of their mission. In addition, Homer teaches us that the sight of weapons may incite men to violence simply because of their physical presence³. Military personnel entering an arena bearing arms may thus appear to subjects as the manifestation of aggression regardless of their intent. Under this premise, the progression of force may be arrayed as in Table 14.

Level	Description	Actions
1	Compliant	Verbal Commands
2	Resistant (Passive)	Verbal de-escalation, Physical de-escalation, tion, Physical relocation, Non-Lethal close combat techniques.
3	Resistant (Active)	Non Lethal and submission close combat techniques, Physical de-escalation, Verbal de-escalation
4	Assaultive (Bodily Harm)	Submission close combat techniques, Physical de-escalation, Verbal de-escalation
5	Combative (Deadly force)	Lethal close comat techniques

Table 1. The Progression of Force

¹ Lawrence H. Keeley, War Before Civilization: the Myth of the Peaceful Savage (Oxford University Press, 1996).

Kostas Dervenis, presentation to NATO Maritime Interdiction Operational Training Centre, 21/2/2014.

^{3.} αυτός γάρ οφέλκεται άνδρα σίδηρος - steel itself draws men to violence, Homer, the Odyssey, Book 19.

^{4.} Paraphrased from Close Combat, U.S. Marine Corps, (MCRP) 3-02B, 1999.





Today we are aware that the neurophysiology involved in the progression of force follows distinct patterns. Neuroscientist Dr. Paul D. MacLean put forth a sophisticated hierarchical theory known as the "triune brain," based on the assumption that the human brain actually integrates three different layers, and that each layer represents a specific evolutionary level ("triune" comes from Latin, tri + unus (one), and means "three in one")5. MacLean's three-brain model links the differences in behavior from each major functional area to the evolution of animal life, arguing that the brain effectively has three parts that are representative of their stage of evolution: the reptilian or old brain, the emotional centre or "limbic" ("old mammalian") brain, and the neocortex or "neomammalian brain". The lack of similar chemistry and anatomy of these three evolutionary formations often gives rise to communicative conflicts between the systems (MacLean, 1977), and these conflicts are important in understanding escalation and the type of violence military personnel will be faced with under specific circumstances.

The reptilian complex, the oldest of the three, includes the brainstem and the cerebellum: this center is activated in cases of pure survival, of lethal close combat. The limbic brain emerged in the first mammals (MacLean coined the term from the Latin "limbus" or girdle, because its components were wrapped around the brain stem). Its main structures are the hippocampus, the amygdala, fornix, and the hypothalamus; the limbic brain is involved with what has been termed "social violence" and statistically does not end in death, but takes place with the goal of establishing hierarchy within the pack⁶. Finally, the two large cerebral hemispheres of the human brain (the neocortex) are responsible for the development of language, abstract thought, imagination, consciousness, science, culture, and civilization - as well as tactical planning for combat, weapons design, and strategic concealment.

The triune brain theory is based on experimental data that seems to accurately reflect the stages involved in the escalation of violence7. However, the method of close combat outlined in this article goes one step beyond to utilize a "Quadrune Brain" model that contains Dr. McLean's three main centers, but also includes the autonomic nervous system as a separate entity. The autonomic nervous system comprises the sympathetic, parasympathetic, and enteric nervous systems, each of which have been found to have distinct effects in combat. The enteric nervous system is of particular interest, is capable of autonomous functions such as the coordination of reflexes, and can and does operate independently of the brain and the spinal cord. For this reason it was described as a "second brain" by its discoverer, and may in fact provide the "gut feeling" all experienced military personnel come to trust8.

In accord with the above, and to address the escalation of violence outlined in the "Progression of Force" diagram, training for military personnel is delivered in compartmentalized modules that target specific applications. Thus, our instructional method has distinct units for non-lethal combatives (centering on escape, movement, avoidance, and minimal physical injury to opponents), submission combatives (centering on controlling resisting adversaries who may offer injurious but less-than-lethal violence), and finally lethal combatives (centering on actual close combat and rapid termination of the adversary). Each of these modules corresponds to a particular brain center: during non-lethal combatives, the neocortex is usually dominant; in submission combatives, the opponent's limbic system enters into play; while for lethal combatives the oldest part of our nervous system, the reptilian brain, is dominant.

Main Tactical Principles

Influenced by combat sports such as mixed martial arts, many close combat methods popular today advocate a "ferocious" response to the arbitrary attack,

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in conjunction with repetitive direct blows and minimal use of tactics; violence against violence and force against force in other words. Much effort is expended on increasing the endurance, strength, flexibility, speed, skill, etc, of the practitioner. History teaches us, however, that veteran soldiers are calm in battle, and that they utilize targeted attacks that expend a minimum amount of energy and resources. Why would anyone consider that hand-to-hand combat is somehow different?

While not belittling or disregarding the importance of increasing a soldier's capabilities for military operations, if ferocity, endurance, and strength alone guaranteed survival, then the dominant species on the planet would have been the cave bear, not homo sapiens.

The cave bear (Ursus spelaeus) was a species of bear that lived in Europe and became extinct about 27,000 years ago. It is likely that primitive man drove these bears to extinction. How did mankind face off against an angry predator roughly ten times his weight and with far greater ferocity, endurance, strength, etc, within the limiting confines of a cave using Stone Age weapons? It is here, in our most primitive past, that we must seek for the basis of our close combat method. Moreover, professionals engaged in maritime interdiction in particular must adapt to the degree of violence they will encounter; reliance on a "ferocious response" may be completely inappropriate for the situation at hand. The main principles of our method are thus based on the following criteria:

1. Self-protection

Great white sharks are ambush predators; their attack flows from a secure position outside the line of sight of their prey and then proceeds with single devastating impact. Having bitten their

quarry, however, they will then back off and allow the animal to exsanguinate and weaken before consuming it.

There is a simple, sound reason for this: there are no hospitals in Nature. Despite being an apex predator of the seas and having no natural predators, the great white protects itself first and foremost. Military personnel must follow similar principles. Lethal combat has two central identifying criteria: all variables cannot be predicted with surety, and no living animal, including man, will submit to lethal force without trying to damage its attacker as much as possible in the process.

Let us provide some common examples of things to avoid. A "boxer's fracture" is a fracture of the fourth and/or fifth metacarpal bones from striking an object with a closed fist (typically a human skull). Boxer's fractures represent over one half of all metacarpal injuries, and males are nearly fifty percent more likely to sustain fracture from a punch than females⁹. A boxer's fracture in combat could result in the operator being unable to properly aim and fire his weapon, placing his entire squad at risk, and the statistical probability of occurrence increases with each punch thrown.

The same lesson must be applied to every part of our anatomy. Eyes can be severely damaged by fingers clawing in desperation. Groins and necks can (and have) been bitten through; the human jaw and teeth retain the capacity to slice through muscle and flesh. Although the human skull is relatively lightly built, Australian scientists found that our jaws are at least 40 percent more efficient than those of the chimp, gorilla and orangutan¹⁰.

As a result, all tactics and techniques

MacLean, P.D., The Triune Brain in Evolution: Role in Paleocerebral Functions, Springer; 1990 edition

Miller, Rory, Facing Violence: Preparing for the Unexpected, YMAA Publication Center (2011)

^{7.} Wiest, Gerald, Neural and Mental Hierarchies, Front. Psychol., 26 November 2012 | doi: 10.3389/ fpsyg. 2012.00516

^{8.} Gershon, Michael, The Second Brain, Harper Collins, NY, 1998

^{9.} Jeanmonod, R. K., Jeanmonod, D., Damewood, S., Perry, C., Powers, M., and Lazansky, V. 2011. Punch injuries: Insights into intentional closed fist injuries. Western Journal of Emergency Medicine 12(1).

^{10.} Stephen Wroe, Senior Research Fellow, University of New South Wales, Sydney, Australia, Proceedings of the Royal Society.

employed in close combat must, by definition, leave no weak points vulnerable to attack. Military personnel must operate from the standpoint that their foe is armed, that hidden weapons and natural weapons can and will be deployed, that tactical errors will occur, and that no opening in the process of threat negation can or will be permitted.

2. Avoiding hubris

Military failures resulting from the fatal flaw of hubris have profound costs, and combatant commanders must maintain a continuous effort to detect and prevent hubris in the course of tactical decisions.

The first line of defense against the perils of hubris is an understanding of its very existence as part of the larger context of human character. Early Greek civilization originally viewed hubris as a grave act centered on self-gratification, such as Icarus flying too close to the sun. In the course of military training, soldiers are encouraged to think of themselves as "elite," "better than," etc. because only by retaining that mental image will they eventually reach a point where their capabilities reflect the ideals they are striving for. But in close combat, it is important that the soldier not overestimate these same capabilities.

Let us take another lesson from nature. Wolves hunting in the wild are very careful to choose the most nutritious food source available that is most easily obtained without danger to themselves. Despite being apex predators, they will always attack the weakest prey at the most opportune time, in such a fashion as to prevent exposure to that animal's defenses. In short, the wolf lacks hubris.

Military personnel must become like the wolf, knowing that they are powerful and maintaining that power through constant exercise, but fully respecting their prey and its capacity to injure them.

3. Maintaining breath, stance, and mental calm

Animals respond to threats in complex ways. The acute stress response is a physiological reaction that occurs in response to an attack.

In human beings, the reaction begins in the sympathetic nervous system. Side effects can include increased heart rate and rapid breathing, tunnel vision, bladder relaxation, shaking, dilated pupils, a cessation of the digestive process, and hearing loss. None of these are desirable in the midst of a military operation.

The parasympathetic nervous system works in opposition to return the body to homeostasis after fight or flight. Therefore augmentation of parasympathetic functions is a primary tool for the operator to "balance out" the burst of energy brought into being by the sympathetic nervous system under stress. The operator can support this function and preserve a state of calm by maintaining a proper upright spine and utilizing deep breathing.

To counteract the effects of the fightor flight response, military personnel must:

a. Roll their coccyx forward so that the lumbar vertebrae are "stretched out," as if attempting to "straighten" the lumbar curvature. The same motion is simultaneously applied to the cervical vertebrae, with the chin pulling inwards, the crown of the skull moving "upwards," and the cervical

curvature once again attempting to "straighten."

b. Employ diaphragmatic breathing or deep abdominal breathing, marked by expansion of the abdomen rather than the chest when breathing. This type of breathing will allow greater amounts of oxygen to enter the lungs and bloodstream using slower breathing rates. Moreover, if the operator is wearing anti-ballistic armor such as a plate carrier, this method will allow for much more relaxed breathing and movement overall¹¹.

If correctly employing these two methods, the operator will find that he can begin to place physiological responses, normally exclusively associated with the autonomic nervous system, under his conscious control. Agnostic researchers and repeated laboratory testing have, over the past thirty years, established that such capabilities lie within our potential¹².

The operator must employ the above in conjunction with a balanced, centered stance in which the hips bear the weight of equipment and arms. He must learn to move smoothly so that wave motion and confined quarters do not limit his mobility or effectiveness on ships and boats. In short, he must move as if wearing medieval armor on the battle-field. Our method incorporates distinct drills and techniques through which this type of movement can be learned.

Each of the course modules (non-lethal combatives, submission combatives, and lethal combatives) relate to a particular brain center that is typically activated with regard to the progression of force. During social violence, for example, it is the limbic system that typically holds sway and submission of the opponent that is the ultimate goal. Students are taught methods by which the neocortex, limbic system, and reptilian complex are kept in constant balance.

4. Incapacitating the opponent's foundation/disabling structure

Great white sharks immobilize northern

elephant seals with a large bite to the hindquarters (which is the main source of the seal's mobility) and wait for the seal to bleed to death before returning to devour their prey. Wolves attack their prey in a similar manner. The pack attacks its quarry as a unit, tearing at its hindquarters and legs from the rear until it falls to the ground, whereupon the wolves proceed to immobilize and then safely devour it.

During close combat, the human body is capable of sustaining incredible amounts of damage. The only safe way for the soldier to engage a threat is to prevent counter-tactics by incapacitating the opponent's foundation and disabling his structure.

In practical terms, this could mean simply breaking and controlling an opponent's balance prior to the execution of a particular technique, controlling the opponent's head, injuring an aggressor's legs to disable his capacity to stand, disabling the delivery system of a particular weapon (severely injuring an elbow for example will prevent use of a knife in that particular hand; breaking the collarbone will prevent an aggressor from lifting the related arm. etc), disabling sensory input (striking the eardrums or the eyes), and similar tactics. The methodology through which the operator employs any particular close combat technique or tactic on an aggressor should follow this sequence: 1) Displacement of the potential threat, 2) Arrest of the delivery system, 3) Incapacitation of the Foundation, 4) Disablement of the Structure, 5) Execution.

5. Attacking the opponent's central nervous system

Contrary to popular belief, individuals engaged in lethal combat can sustain severely damaging wounds and still continue to fight on, even successfully delivering lethal force against their opponents. Subject to the empowering boost of the hormones delivered during the acute stress response, police officers and criminals alike have been shot

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Figure 1. Melee and natural weapons used in hand-to-hand combat 14

in the chest (and heart) and gone on to terminate their foes (sometimes before expiring themselves). This is why the previous step (disabling the opponent's foundation and structure) is all important during close combat, and, as we have seen, is the method that is unilaterally followed by all predators in nature to secure their prey. Only an attack on the brain stem itself, or secondarily, on the central nervous system, will result in immediate threat termination.

Given the physiological responses inherent to the acute stress response, for example, an aggressor may not feel pain in a particular limb or in a particular region of the body during combat. Enemy personnel have proceeded to bite into a NATO soldier's genitals after having had half their arm blown off by a grenade and one eye gouged out during hand-to-hand combat¹³. The only secure method for attacking an aggressor's central nervous system is by retaining conscious control through-

out the process; this involves very deliberate choices, angles of approach, and methods of engagement. In developing our method, we learned from nature, from the practice of hunters and butchers throughout human history, and from the European record of close combat over the past three millennia.

Epiloque

Combat within close quarters may include lethal and nonlethal weapons and methods depending upon the restrictions imposed by civilian law, military rules of engagement, and personal ethical codes. It may result in a one-on-one duel (unlikely) or (typically) denigrate into a melee as shown in *Figure 1* from 1905, where anything can happen at any time, and all weapons are used every time. Indeed, the term for massed close combat derives from the French mêlée (which comes from the Latin miscēre, "to mix"), and refers to groups of warriors interlocked in close combat devolving into a chaotic scenario.

^{11.} While traditionally associated with Zen Buddhism, this method of breathing was also used by Greek hoplite warriors wearing bronze breastplates in ancient times. Bronze armour is not flexible; a soldier wearing a tight-fitting metal cuirass was obliged to "breathe with his belly."

^{12. 0}http://www.icemanwimhof.com/science

^{13.} U.S. Army Staff Sergeant D.B. in Fallujah, Iraq, 2004, during Operation Phantom Fury.

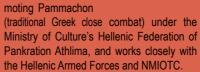
^{14.} Rencontre d'Apaches et d'agents de police sur la place de la Bastille, Bibliothèque nationale de France, 1905.

operating on a balcony or with our back to a guardrail. Careful tactical consideration of all these parameters is what can make a method of close combat successful during maritime interdiction - or not.

In accord with the main tactical principles outlined previously, because anything can and does happen during close combat, because we cannot assume that there will be only one opponent, because we must ing concealed and unconcealed weapons, because our mobility may be restricted by space and/or by the press of a crowd, and finally because we must always prepare for worst case scenarios in the course of military operations, the system of close

combat we employ must be fully functional under the conditions portrayed in Figure 1. Moreover, we must make these conditions even more threatening by entering in the factor of armor: our opponents may be assume that the opponent(s) is (are) carry- fully armored while we are not, or armor may hinder our movements but not that of our opponents. We may have to contend with the steel walkways and bulkheads of a ship pressing in upon us, or cold concrete under our feet and sharp glass at our sides in urban warfare. We may be

Kostas Dervenis sional, and internapreserving and pro-





NMIOTC 5th Annual Conference Icebreaker





5TH ANNUAL CONFERENCE

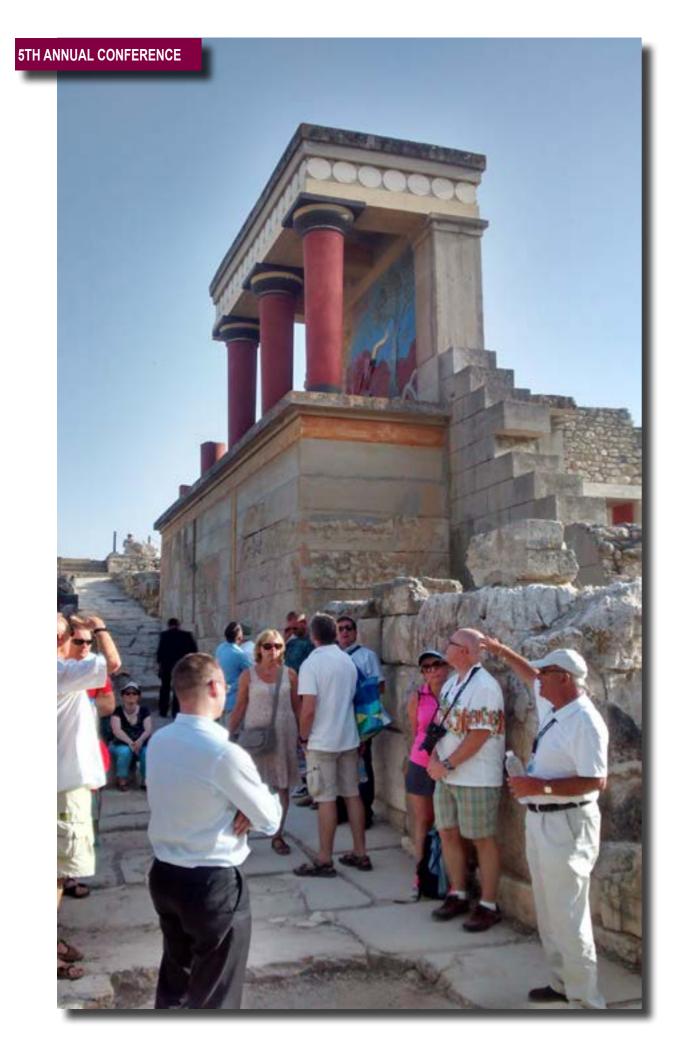




5TH ANNUAL CONFERENCE







NMIOTC 5th Annual Conference Excursion to Knossos



NMIOTC 5th Annual Conference Reception to the Army Museum, Villa Clodio at Chromonastiri





Visit of the NATO SNMG1 Commander, Commodore Nils Andreas Stensønes NOR (N)



Visit of the Australian Defence Attaché to Southern Europe, Captain Paul K. Mandziy RAN



Visit of Foreign Defence Attachés, from Egypt, Albania, Belgium, France, U.A.E, U.S.A., Spain, Italy, Iran, Libya, Nigeria, Hungary, Poland, Romania, Russian Federation, Serbia and Turkey.



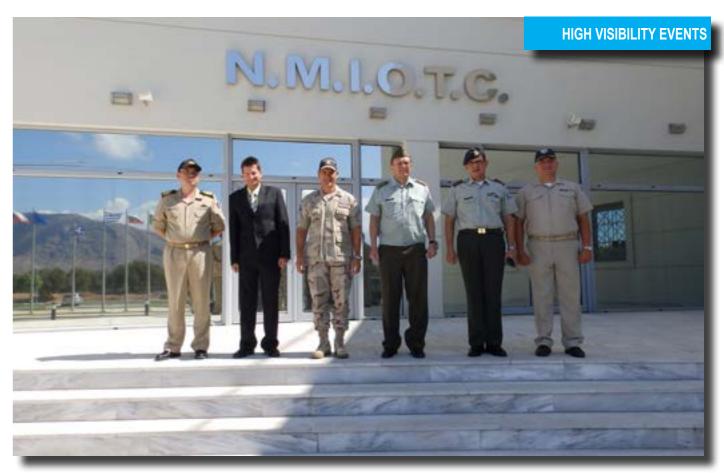
Visit of the Turkish Naval Attaché, Commander Halis Tunc (TUR (N)



Visit of the Defence Attaché of India accredited to Greece, Group Captain Pawan Kumar IND (AF)



Visit of the Ambassador of VIET NAM to Greece, His Excellency Mr. Vu Binh



Visit of the Director of the Multinational Logistics Coordination Centre (MLCC) Prague, Colonel Miroslav Pelican CZE (A)



Visit of the QATARI Delegation, consisted of Br. General (Sea) Tariq Alobaidli, Br, General (Sea) Hamad Al-Kuwari, & Lt Mubarak Hassan Al-Mosllamani



Visit of the Chief of Italian Defence General Staff, Admiral Luigi Binelli Mantelli



Visit of the Ambassador of INDONESIA, His Excellency Mr. Benny Bahanadewa, escorted by the Minister Counsellor Mr. Yayat Sugiatna



Visit of the Commander of Joint Force Command Naples, Admiral Mark E. Ferguson III USN, accompanied by the Chief of Hellenic Navy, Vice Admiral Evangelos Apostolakis GRC (N)

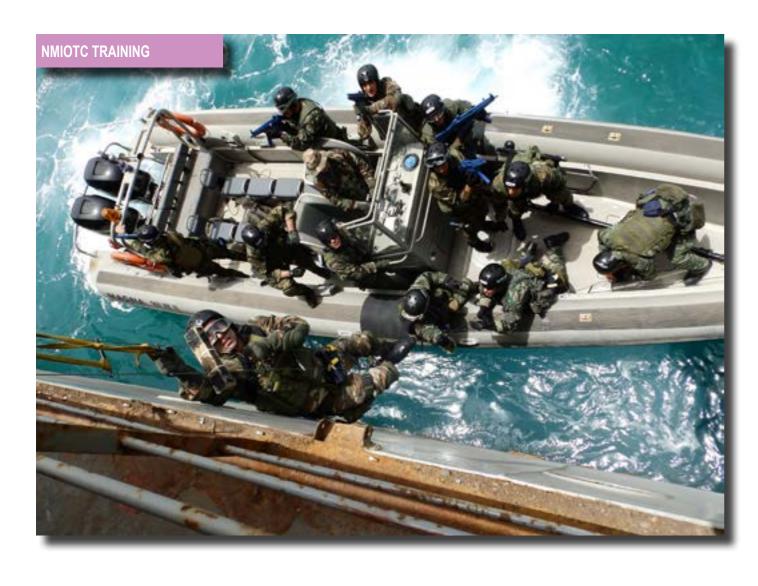












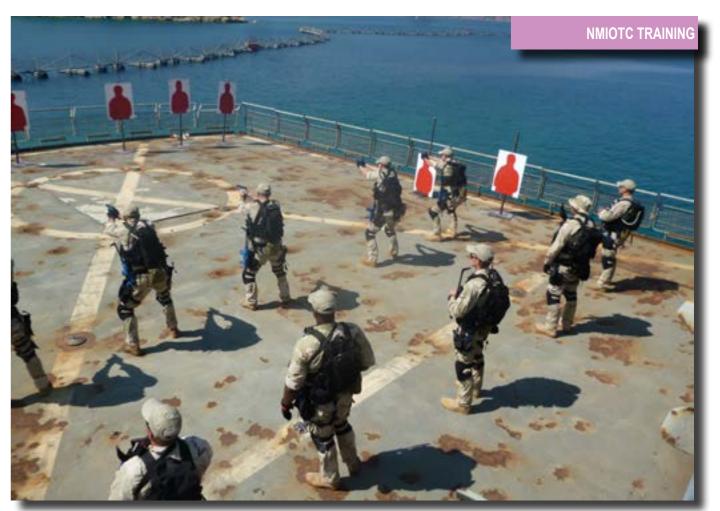


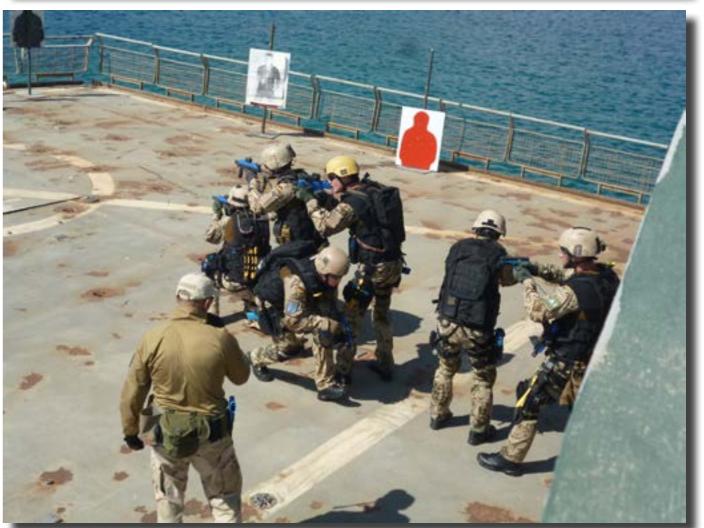


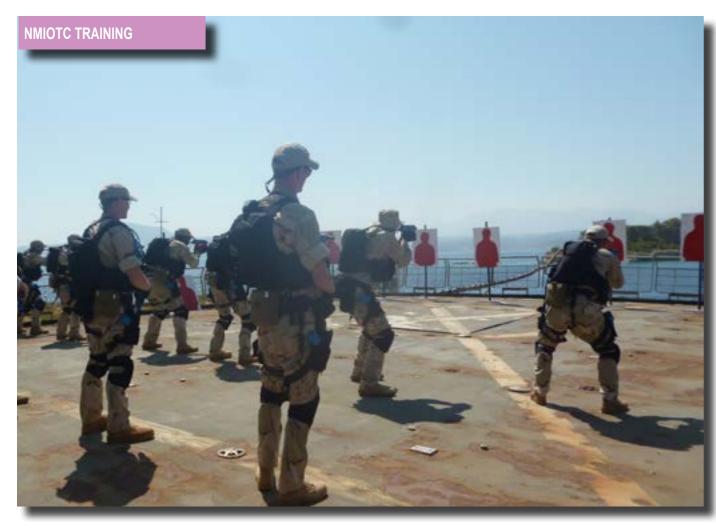




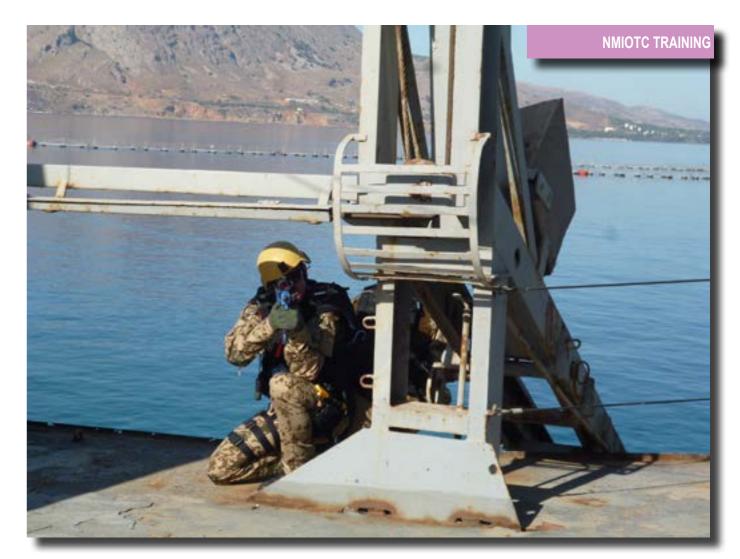




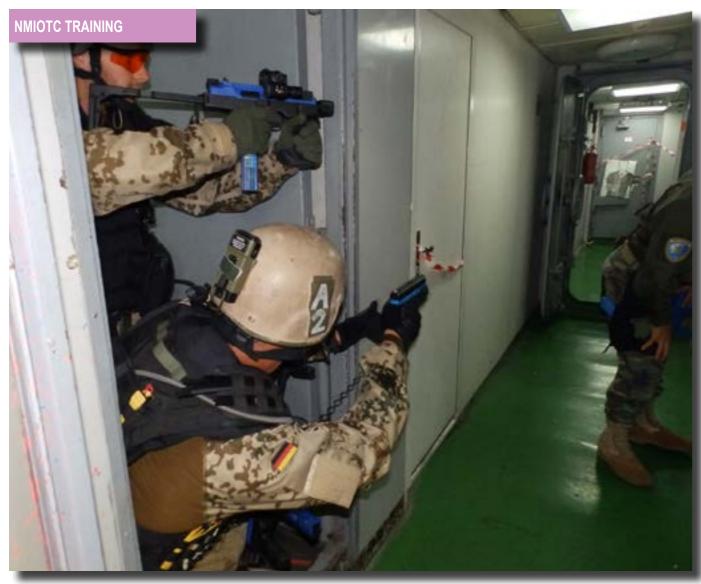








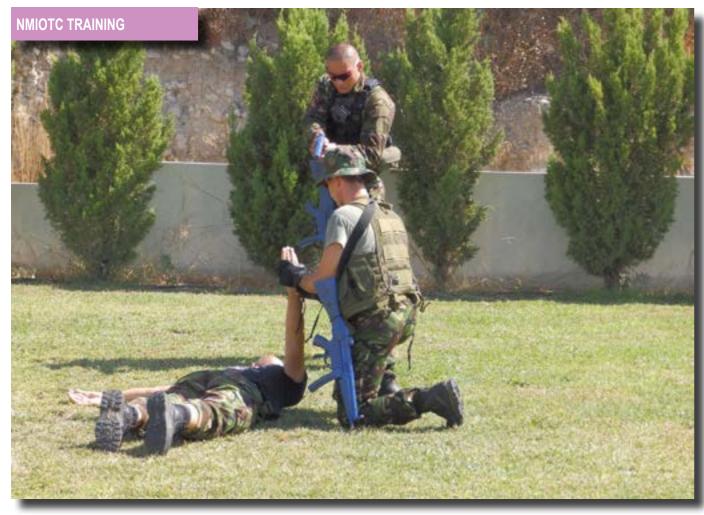






















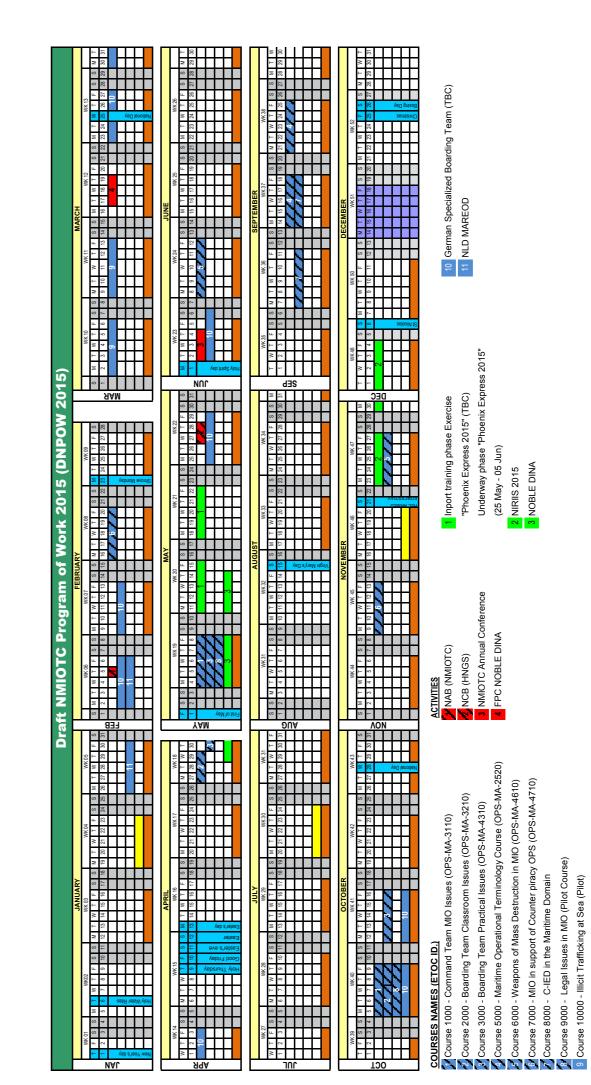












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